Comments made within the framework of the Espoo procedure in relation to the environmental impact study (EIS) of the planned opening of the Rosia Montana mine, compiled by the Hungarian Ministry of Environment and Water on the basis of government and non-governmental organizations

In August 2002 Hungarian Ministry of Environment and Water notified the Ministry of Environment and Water Management of Romania that Hungary can be potentially affected by the implementation of the planned mining investment in Rosia Montana. Hungary, as a potentially affected party, asked for the application of the UN ECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) after the permitting procedure of this mining activity had been launched by Romanian authorities. The international environmental impact assessment procedure according to Espoo Convention was started in January 2005, when answering the notification according to the Convention sent by the Romanian party, Hungary confirmed its intention to participate in the procedure. Romanian Ministry of Environment and Water Management sent the environmental impact assessment documentation compiled by the investor to Hungary on 13th June 2006.

Hungarian participation in the environmental impact assessment procedure of the Rosia Montana goldmining project has been run in complete accordance to the Espoo Convention so far, Hungary appreciates the willingness of cooperation manifested by the Romanian party.

The basis of this document consisted of the opinion of experts invited and/or employed by Hungarian authorities and incorporates remarks originating for non-governmental organizations and concerned citizens in relation to the environmental impact assessment documentation of the Project.

I. Summarized and general comments

The EIS does not discuss the impacts of the planned investment in an appropriate professional manner and fails to provide an objective picture of the planned investment's environmental effects.

The quantity of measurement data supporting and confirming certain statements of the EIS is insufficient, deficient, inaccurate, or not considered to be representative.

The complete material typically uses the terms "very low probability" or "very unlikely" in relation to risks which is not in conformity with any scientific approach, particularly if the essential final conclusions are drawn in such a manner. Such assertions must be supported with modeling and probability calculations.

The documentation does not provide a full and satisfactory answer to the questions raised in the scoping list submitted to the investor (it lacks, *inter alia*, the modeling of pollutants emitted into water systems and bodies in the event of an accident; the description of environmental conditions for the past 5 years; in relation to the analysis of processing technology, reference data on the 2 European plants of similar size and operating with similar technology is missing; the technical design parameters of certain facilities are omitted; analysis of ecological risks caused by hazardous materials emitted into the outlet water streams; application of environmental control systems; ensuring the accessibility of measurement data; technical inspection methods applicable in the course of construction).

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Because of the considerable deficiencies and inaccuracies of the EIS provided by the Romanian party, - in spite of its large volume - it does not provide an adequate basis for objective evaluation within the framework of the Espoo procedure.

The material essentially declares general observations and subjective determinations as fact, frequently without any explanations or data of proving force.

Due to the excessively generalizing nature, false basic conclusions and major deficiencies of the EIS, we propose that the competent Romanian authorities not approve the impact study within the framework of the permission procedure.

The Hungarian party is ready to take part in consultations with the Romanian party as to the problems and comments formulated in this document.

II. Baseline recording

1. Various topics are mixed in the baseline report relating to waters, sediments, chemical and biological analyses. The titles of the sections are not in harmony with the content (e.g. the biological and bacteriological section deals with the description of the drainage areas). Parts of the material prepared by various experts are not correlated.
2. Data relating to the quality of waters, particularly subsurface waters, is deficient; it is difficult to link data with the given period and origin. Frequent reference is made to long data series, but these have been omitted from the report. It is not clear as to which periods are incorporated in the aggregate tables. In general terms, most of the presented data is outdated (e.g. biological data from 1998), it does not reflect current conditions.
3. The information content of certain determinations is inadequate, e.g. subsurface waters are of a "good condition" – what is the basis for such evaluation?
4. In some instances the analyzed periods are short; data series of a few weeks or months are not appropriate for substantiating professionally correct conclusions. The range of analyzed components is not broad enough, some important components are missing (e.g. various forms of cyanide, organic micro-pollutants, etc.).
5. The description of sampling locations is deficient; the number of wells included in the analysis is only a fraction of what is needed for an objective assessment of conditions.
6. The analysis does not contain modeling events in relation to changes in subsurface waters (flow directions, pollution spread, etc.), notwithstanding the fact that there are procedures which can provide even a three dimensional picture on expected changes.
7. A load test, material balance has not been completed; the degree and spread of subsurface water pollution cannot be accurately determined.
8. The meteorology related baseline report bases its assertions on a measurement program conducted in 2004, although the majority of data series contained therein is linked to the period extending up to 1997-1998.
9. Please support with facts the assertion that the mean temperature in the area in the period from December to March is 4 C because the Hungarian average values, for example in this period are in the range – 2 to 4 C.
10. The expected temperature conditions are not sufficiently taken into account (e.g. the significance of monthly average temperatures in the course of the cyanide dissociation process, risk of freezing surface pipelines).

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11. The geological baseline recordings are deficient; no recordings were made on the location of important facilities, such as temporary hazardous waste sites, temporary ore storage facilities, existing mining facilities.

12. The impact study does not provide enough information on old mines, existing facilities located at the site of the investment, thus the possible changes cannot be followed through. The material should be supplemented with plans relating to the rehabilitation of the old mines.

13. With regard to the water balance of the area, it is not analyzed as to how much water is to be removed prior to the commencement of mining and what will happen to the presumably polluted water.

14. It is unacceptable that an accurate geological recording was not made in relation to the Corna valley tailings management facility (TMF) and the survey was conducted 150 meters lower. This may be important with regard to the accurate knowledge of the faults in the valley. The special characteristics of these must be available to decide whether foil insulation is needed underneath the storage facility.

15. The material does not indicate the type of hydro-geological model used and basic data is unavailable, therefore results derived from the model cannot be verified.

III. Technological processes

16. The baseline descriptions, geological, water balance related risks, environmental impacts, etc., noted in the previous chapters are repeated in the study. Why are the seismological results, for example, found among technological specifications?

17. Several references are made to studies which were not mentioned previously, e.g. in relation to hydrogeology.

18. According to the technological specifications, the TMF was put 250 meters higher and the second dam 400 meters higher. Previously 150 m was specified. Which is the real value? Has the planned final location of the dam been realistically recorded?

19. The list of chemical substances, fuels and explosives used in the technological process should be supplemented. The operational material balance has been omitted, thus we are unaware of the precise quantity and type of poisonous materials used in the technological process.

20. The material does not analyze the impact mechanism of the pollutants (cyanides, heavy metals) applied by the technology, the occurrence and management of possible hazardous situations caused by these.

21. The cyanide balance is questionable; the quantity dissociated into air, in the tailings and emitted in comparison to the received quantity.

22. The risk of the spread of toxic aerosols and the occurrence of "cyanide rain" is not adequately taken into consideration.

23. Similarly to the other documents, the chapter discussing waste basically repeats and recapitulates determinations contained in other volumes of the impact study document. Risks inherent to waste, however, are judged negligible compared to other risks related to the operation of the mine.

24. The BAT reference in chapter 6 is not clear and the attached table is unintelligible as well.

IV. Possible impacts

25. The first volume discussing possible impacts on environmental elements (4.1 Water, Volume 11) also commences with repeated items (meteorological, climatic conditions, condition of surface, subsurface waters, etc.) which are discussed in detail in previous sections, or the same results are presented in another form, or other data is also presented.

26. In the chapter discussing accidents, overflows and a dam burst is considered negligible (extremely unlikely), but the emission of water with cyanide content and a low pH value into living water is not ruled out in the event of extreme weather conditions occurring every 100 years.

27. The model mentioned in chapter 7 cannot be identified; only the determinations were recorded in a table. In this form it cannot be verified.

28. The chapter on waters does not mention or take into regard the Water Framework Directive (WFD), the objectives of which must be implemented by Romania, as well. Only positive impacts are assumed with regard to the implementation of the investment. Similarly, in the course of devising the monitoring systems, the WFD aspects are disregarded, biological parameters are not produced and the frequency of measurements is unsatisfactory, including the range of analyzed parameters.

29. The long term waste management plan for acidic rock drainage (ARD) is not adequately substantiated, cost-profit analyses have been omitted.

V. Analysis of possible versions

30. The possible versions are examined in volume 16 of the impact study documentation. We do not agree with the assertion that the cancellation of the project would only imply adverse consequences, that is, the condition of the environment would further deteriorate due to the mining activity of the past, and the loss of new jobs would contribute to the growing underdevelopment and poverty of the region. To our knowledge and according to information provided by our Romanian partners, the program serving the closing of the Minvest tailings management facilities in Déva is underway, comprising part of the program serving the closing of 16 tailings management facilities, as defined in Annex 7 of the Romanian accession treaty. Approximately 80 million EUR is available for this purpose, that is, the environmental problems caused by the region's environmentally damaging mining activity in the past may be resolved. In addition, the owner of Minvest, the Romanian state, is obliged to rehabilitate the environment of the region following the shutdown of mining in the course of this year. We understand that the Romanian Ministry of Environmental Protection and Water Management has allocated funds for the first phase of the closing.

31. In relation to other development alternatives in the area (e.g. tourism, agriculture, light industry), the view is unacceptable that other types of development projects would produce environmental risks similar to those associated with the planned mining investment.

32. The document fails to objectively examine benefits originating from other forms of development; there is no mention of the cost-profit analysis of possible versions. Other development projects should be compared to the costs, benefits and environmental risks related to the planned mining investment. For example, concepts elaborated for the

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development of tourism, regional development and agricultural funding possibilities preceding and following EU accession should have been taken into account.The study of such alternative economic development possibilities was also supported at the joint meeting of the Hungarian and Romanian governments.

33. The study also failed to examine other development opportunities for the population of the area following the termination of mining activity (in roughly 17 years), e.g. the limitation of agricultural and tourism development due to mining, the future availability of other jobs, etc. On the basis of the foregoing, it is false and unacceptable to claim that only the implementation of the investment could contribute to improving the environment of the region and economic development.

34. Technologies substituting cyanide were not analyzed in detail; generally there is one assertion stating that "other methods are potentially more dangerous or technologically/economically inappropriate". This claim would also need to be evidenced with cost-profit analyses. Other non-pollutant or less pollutant substances, replacing sodium cyanide, should have been tested with semiplant experiments to determine the applicability of the technology.

35. Various versions of waste water management should also be supplemented with cost-profit analyses.

36. With regard to the closing of the mine, more detailed tests are required in connection with the backfilling of the open pits. In this case, too, its necessity should be evidenced with profitability calculations, and there is the need to prove that the backfilling does not pollute the subsurface waters due to the ARD potential and the presence of heavy metals.

VI. Monitoring systems (Volume 17.)

37. The description of the monitoring system monitoring the condition of water is not full in its scope; the measurement methods of important parameters (e.g. weak acid dissociable (WAD) cyanide) are not indicated, the creation of the sampling network is not representative and there are few monitoring stations. Moreover there is no information available on the surface and subsurface sampling locations, e.g. well data: depth filtering, etc. The material does not discuss issues related to quality assurance, data collection, validation and the disclosure of data.

38. The chapter on monitoring is pasted together; the WFD requirements are omitted, references are incorrect, data is outdated in some places and is not regarded as characteristic of current conditions.

39. The EIS lacks the necessity of devising a monitoring system which provides comprehensive and continuous data, immediately signaling to a central station in the event of a possible emergency or exceeded threshold values.

40. The Emergency Preparedness and Spill Contingency Plan must contain a forecast-alarm system detecting the spread of pollutants along paths in surface waters.

41. Additional tests are necessary in relation to possibly accumulating pollutant/toxic substances in deposits, and the range of ecological tests, complying with the requirements of the Water Framework Directive, should be expanded.

VII. Risks (Volume 18.)

42. The impact study material lacks the analysis of the environmental impacts of similar Romanian investments (TRANSGOLD in Nagybánya, Borsabánya), for these mines have on several occasions caused extraordinary pollution which also posed a risk to Hungarian surface waters.

43. In the absence of appropriate water quality models, the environmental impact study does not offer a satisfactory answer regarding the potential environmental impacts on water, thus the evaluation of impacts on the water environment are not acceptable, either.

44. A detailed (certified and evidenced) pollutant spread model test, relating to the total affected waterflow system, should be carried out, assuming the occurrence of an event of however small probability which may contribute to the emission of some of the substance contained in the tailings management facility into the surface waters under operating conditions. A detailed analysis of accident probability should furthermore be performed, closely linked to climatic change scenarios and the evaluation of the above in summarized tables.

45. It is necessary to devise a detailed emergency plan primarily serving the protection of surface waters.

46. The impact of cross-border pollution on protected natural values should be analyzed (primarily in the area of the Körös-Maros National Park).

47. The chapter dealing with the occurrence of emergencies caused by natural catastrophes is inadequate and not supported with reliable evidence.

48. When describing hazards, indicators expressing magnitudes should be indicated (in hydraulic engineering and in relation to earthquakes, this is revealed by the probability of occurrence and the proportionate magnitude).

49. When estimating standard load, one must consider possible extreme load (precipitation, earthquakes) – occurring with lower probability – in the course of the roughly 20 year (30 years including termination) construction/operating period and the real risks this can create when combined with specific accident scenarios.

50. Technological risks related to the management of chemical substances should be assessed differently if the hazards are not the result of natural phenomena but human error, negligence or defects in design/construction/material quality.

51. The safety of cyanide transport on public roads/rail is not discussed (poor quality roads – particularly in the winter and spring season).

52. Measures linked to the development of the transportation/delivery infrastructure lying outside of the plant premises should also be detailed, considering the lack of information related to cyanide transports partly made on public roads. We should expect the transport of 12 thousand tons of *sodium cyanide* annually partly on public roads. Considering a 20 ton freight per truck, this would correspond to at least two deliveries per working day (600 a year and a total of 8,000 deliveries). The specific logistical concepts are unknown, although the material makes a reference to the "maximum utilization of rail", and no mention is made on the unloading station, the possible public road transport routes, transport related precautionary regulations and emergency and accident prevention plans. It is a cause for concern that an operation of 13-15 years – including cyanide deliveries deemed to be dangerous goods transports – is planned without the construction of a direct rail connection. In a period of such length, with transport performance of such size under

the known road conditions, it is almost certain that multiple accidents will occur in which the transport vehicle directly falls into a water flow (see the Kumtor incident in Kirghistan), and no information may be available on the event for hours. The documentation does not contain data on the identification and prevention of the above risks (this deficiency must by all means be remedied from the point of view of the party suffering the impact).

53. The risk analysis related to flood risks correctly recognizes the rise in the risk of flood accidents but fails to provide detailed information on the referenced forecasting models. Thus the assertion is unacceptable that planning provides sufficient protection against such events.

54. In the chapter examining cross-border impacts, in several places certain events are falsely assessed as local impacts which potentially produce an extensive impact. The impact of cyanide, for example, possibly emitted into surface water with water seeping through the dam of the tailings management facility is evaluated as a local impact.

55. In relation to quality risk analysis, it would be practical and necessary to provide more detailed quantity risk analyses on all accident series of events which

   - have a frequency of over 1E-8/year *and*
   - the consequences are greater than the moderate level *and*
   - the risk index is ≥ 8

- It would be necessary to describe in more detail and identify the selected event series for the additional quantity analysis. In the current study it is not clear as to why only a few of the identified, possible serious accident event series were selected for the quantity risk analysis.
- It would be necessary to provide a more detailed description of the consequence and reliability analysis. The study only contains general modeling assumptions. It is also unclear as to how the frequency of possible serious accidents was calculated and determined in quantity (e.g. with the fault tree/event tree method).
- The detailed consequence-result of not a single possible serious accident event series was provided (e.g. impact zones of the event series, considering the time window of the specific event series as well).

56. In relation to the stability of the TMF's dam, we object to an "only" 60 m deep dam burst taken into consideration which is successfully contained by the lower dam. Why was no analysis made of a possibly greater accident? In knowledge of the consequences of the accidents in Nagybánya and Borsabánya, the claim is totally unsubstantiated that the escaping tailings reach a distance of 1.6 km.

57. When analyzing the cross-border impact, the cyanide concentration is of relevance (WAD, total, free?) which may even reach the value of 1.3 ppm. In the summary, however, a concentration of "only" 0.03-0.5 ppm is mentioned. What are the real values produced by the model? The above assertion is only supported by a single, deficient table which basically only contains the final results of a few scenarios. The precise flow kilometers, for example, are missing in relation to the mentioned cities, as well as the rate of the water discharge on the examined river sections and substantive data to support the results.

58. The data (in case of tailings concentration in TMF) only relates to an average of 4.5 ppm discharged cyanide concentration. Scenarios relating to a higher cyanide concentration are not discussed. (The cyanide pollution in the Nagybánya incident was considerably greater.

If – in case of TMF - only the 10 ppm concentration set out in the mining waste directive of the EU could be ensured, greater pollution would occur, and a larger concentration is not indicated in the scenarios.) Moreover if cyanide concentration would be around 1.3 ppm in the outlet water streams, as described in the impact study, that would be 13 times higher than the threshold value!

59. Several references are then made to models, yet there are no accurate references which can be verified.

VII/1. Calculation of individual risk and social risk

60. It would be necessary to review in detail the quantitative definition of risks and results thereof of each of the *possible serious accident event series* and prepare a report on these. It is important to understand the risk elements produced by the individual impacts.

61. It is not clear why diagram 7.24 depicts both social and individual risks in the same diagram. Generally the individual risk curves are illustrated on the map as individual risk curves, and their value is determined by the coordinates and distances and impacts produced as consequences.

62. It would be necessary to prepare some kind of risk classification (ranking), considering the total *possible serious accident event series*, in order that the impact of the total event series be incorporated in the full risk.

63. With regard to Hungarian SEVESO regulation, the maximum and minimum risk criteria do not correspond to criteria considered in the study. In consideration of such criteria, the social risk curve in the study is between the Hungarian maximum and minimum risk criteria levels which means that risk reducing measures are required.

64. It is also necessary to provide the applied (validated and verified) software codes for the reliability analyses and consequence and risk analyses.

65. The process of modeling and accurately calculating the on-site health and environmental risks is not presented. It is necessary to describe the detailed method of the calculation process of environmental and health risks relating to all considered event series. It would be practical to understand why the quantitative values of tables 7-34 were produced.

66. We do not agree with the risk analysis of the project's alternatives; we disagree with the rejection of version "0", that is, the non-implementation of the project. This solution does not increase the current risks; the management of such risks is ensured through the recultivation of the Minvest facilities in the region and we understand that the necessary funds are available for such purpose. The rehabilitation plans will manage the risks related to the abandoned dumps and the ARD related problem.

67. We find the rejection of cyanide-free technologies unacceptable without more in-depth tests. Cost-profit analyses would also be necessary to enable the assessment of such alternatives.

VIII. Description of difficulties, Volume 18

68. The two (2!!!) page description does not list already known deficiencies, problems and uncertainties, therefore it is unacceptable!!! The Hungarian request, formulated in clause 8 of the scoping document, is not satisfied, namely, that "the analysis should examine in detail the deficiencies and uncertainties underlying knowledge".

IX. Cross-border impacts

69. The most important chapter from a Hungarian point of view is rather limited in describing the analysis of cross-border impacts. Unfortunately, in place of a well presented, "clean" material, only references are made to the fact that detailed information is contained in various volumes. Accurate information could have been provided in this regard if we also consider the frequent repetitions of the other volumes.

70. This section of the documentation is incomplete, it fails to meet the "Espooi requirements". The listing of various international requirements is insufficient in itself, moreover it is in disregard, for example, of the very important conclusion that the positive impact of the mine opening on the environment is not proven and even less so that disadvantages would arise from the "zero solution" in the impacted area of Hungary if the investment was not implemented.

71. It is unacceptable that a 21 page material starts discussing substantive issues from page 14 and only with table descriptions.

72. We disagree with the assertion that the pollution of surface waters, ARD pollution could only happen on a local/regional level – the contrary has been proven by numerous pollution incidents in the past. The study, too, makes many references to instances of "historical" pollution which continuously imposes a load on waterflows, spreading to Hungarian territory. The same applies to accidents related to the tailings management facilities.

73. On the basis of the above, the assertion that a possible dam burst would not cause any cross-border environmental impacts is unsubstantiated and unacceptable.

74. In the course of analyzing cross-border impacts, conformity with the international regulations below should have been analyzed:
   - OECD Guidelines for Multinational Enterprises (especially Chapter V. - Environment, p.-p. 3., 4. and 5.),
   - OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response (2003.) + OECD Guidance on Safety Performance Indicators (2003.),
   - UN ECE Convention on the Transboundary Effects of Industrial Accidents (1992.),
   - UN ECE Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) – Geneva, 30 September 1957 (current text with all amendments in force),
   - OTIF Regulations concerning the International Carriage of Dangerous Goods by Rail, 2005 (RID),
   - UN ECE Protocol on Civil Liability and Compensation for Damage Caused by Effects of Industrial Accidents on Transboundary Waters (2003.),
   - UN ECE Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation (CRTD),
   - Rotterdam Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade (1998.),
   - UNEP APELL (Awareness and Preparedness for Emergencies at Local Level) for Mining (2003.),

- UNEP/ICOLD1/ICME2 – Environmental Regulation for Accident Prevention in Mining: Tailings and Chemicals Management; Mining and Sustainable Development3,
- UNEP/WB-IFC4/MMSD5 – Finance, Mining and Sustainability.
- UN ECE Convention on Protection and Use of Transboundary Rivers and International Lakes.
- 76/464/EEC Discharge of Dangerous Substances Directive.

75. Inaccuracies are contained in chapter 4.1 of the same volume (e.g. the length of the Maros in Hungary is given as 20 km).

76. The claim that the planned investment does not cause a major improvement in the quality of the Abrud river seems contradictory for the improvement of the current condition is one of the chief motivating factors behind the opening of the mine. Obviously any measure could result in a cross-border impact.

77. Assertions made earlier in several places – unsupported with evidence – that the pollution of the waters and the dam burst can only cause local problems are unacceptable. The same applies to risks underlying transports.

X. Waste Management Plan (Volume 22.)

78. The volume containing the waste management plan basically reiterates word for word the descriptions, conclusions already made in Volume 10.

79. The chapter contains references to the rules of Directive 2006/21/EC on the management of waste from extractive industries, but does not contain any specific plans.

80. Detailed plans should be elaborated on the basis of the above directive with regard to the following, for example:
    - waste management plan (Article 5);
    - procedural and material legal obligations relating to the prevention of serious accidents (Article 6, Annex I – accident prevention concept, safety control system, internal and external emergency plan);
    - construction and control of waste management facilities (Article 11 – e.g. minimization of damage caused in the landscape, reporting obligations, costs);
    - closing, post-treatment and costs thereof (Article 12);
    - general preventive measures (Article 13);
    - availability and amount of financial collateral (Article 14).

XI. Water Management Plan

81. The sections of the chapter (Volume 23) on water management, discussing the cleaning of waste water, contain references implying that the details will be described in a later version of this management program. This version does not contain information relating

[1] International Commission on Large Dams.
[2] International Council on Metals and the Environment
[3] workshop held in cooperation with the Gov-t of Australia
[4] World Bank – International Finance Corporation
[5] Mining, Minerals and Sustainable Development Project

to the operation of the waste water cleaning facilities, the costs of their operation and data on incoming and outgoing waste water.

82. In relation to surface mining, changes expected in the wells of the surrounding area have not been analyzed; the level of subsurface waters is likely to fall; this condition should be modeled.

XII. Issues related to tailings management facilities (Volume 25)

83. The compilation also uses materials already included, in a moderately revised form. It contains descriptions related to the design, construction and operation of TMFs but less verifiable data.

84. An accurate geological – geotechnical cross-section is not available in relation to the area of the TMF.

85. It must be substantively certified that the soil may be appropriately solidified up to reaching a water seal; justification is required as to why the implementation of technical protection is unnecessary in the area of the TMF. It is not sufficient to analyze seismic hazards for 17 years; the TMF will remain in place following the closing of the mine.

86. No reserve storage capacity is planned in addition to the storage capacity planned in the Corna valley which would enable the diversion of continuously incoming tailings quantities in the event of a breakdown or emergency (e.g. precipitation of an intensity and/or duration significantly exceeding the average value which could fill up the tailings storage capacity). The omission of the above from planning should be justified and supplemented.

87. No subsurface water emergency storage capacity, with adequate volume, is planned for the event of a dam suffering a fault (caused by overflow, earthquake or other stability related problem). The planning and construction of a subsurface water emergency storage capacity, with adequate volume, is extremely important with regard to establishing environmental safety, for this could prevent the spread of hazardous industrial waste water leaving the tailings storage facility in the event of a possible dam burst.

88. Data relating to the specific density of the tailings is hypothetical; different values are listed in the table, in disregard of the recommendations and requirements of the Dangerous Substances Directive 76/464/EC.

89. Only the pumping of tailings with 45% water content was examined; calculations related to alternatives with higher – safer – concentration are unavailable.

90. The Corna valley is situated in a fault zone which has not been adequately researched with regard to the long term stability of the dam, the characteristic condition of the soil and the water sealing capacity of the TMF's support.

91. The construction of a multifunctional dam warrants that the clay core of the dam is made of water-proof material, it does not swell or slide and pressure does not cause any changes. Considering the extreme height of the dam and the quantity of stored material, stability must be evidenced with at least a model experiment and calculations. The study does not reflect recommendations defined by ICOLD (International Commission of Large Dams).

92. It is unclear which model was used for modeling the stability of the dam; baseline data is unavailable.

93. It is necessary to supplement the plan relating to the maintenance and monitoring of the dam.

94. It is necessary to examine whether spills may nevertheless occur, possibly causing a fault in the dam, in the event of a critical precipitation load, possibly involving the breakthrough of "external waters" contained by the curtain drains (for the reason that the curtain drains are not sized to drain the maximum possible amount of precipitation).

95. Is the volume of the second storage facility sufficient to withhold water possibly leaving the spillway? No subsurface water related tests were conducted in the surroundings of the TMF.

96. The specification of the planned dam's height is essentially important for the assessment of the risks of expected environmental impacts! From the point of view of risks, it is not irrelevant whether the dam is 185 or 200 m high (nearly 10% variation). Unfortunately the various volumes indicate different values.

XIII. Cyanide management (Volume 26.)

97. The cyanide management plan exclusively contains general descriptions regarding the transport and use of cyanide. (We analyzed above risks related to the management of cyanide.)

98. According to the documentation, the decision is pending as to the transport route which we judge to be a major factor due to the risk estimates.

99. In the course of applying the CIL technology, the manually controlled dosage of the cyanide solution is problematic; this procedure is not in conformity with BAT. We are of the view that in the INCO procedure the impact of winter cold weather on the applied HPD plastic pipes – running on the surface unprotected – was disregarded.

100. There is no plan for introducing any environmental quality assurance system, related to the operation and monitoring of the system, which would significantly improve operating safety conditions.

101. The BAT reference document on the management of mining tailings describes 3 European mines operating with cyanide technology. Of the above, 2 mines produce a WAD cyanide concentration of less than 2 ppm in the tailings management facility, this being the result of the best available technique (BAT) in Europe. The impact study targets "compliance with EU standards", but plans a WAD cyanide concentration of less than 10 ppm in the tailing storage facility, notwithstanding the fact that this is not an existing but a new facility. Pursuant to Directive 96/61/EC (IPPC), however, as of October 2007, the given facility may only operate by the application of the best available technique; the value below 10 ppm requires clarification which is currently below 2 ppm in accordance with the prevailing BAT. If access to the BAT is indeed the purpose of the investor, it must follow the currently evidenced best technique.

XIV. Preparation for emergencies and damage prevention plan

102. The damage prevention plan primarily describes rules of procedure; measures to be applied in the event of an assumed incident, including the process of detection, notification and prevention.

103. Standard Operational Procedures are prepared in certain cases; the referenced annexes provide information on the details thereof. Unfortunately, volume 28 does not have annexes. There is, however, reference to the fact that such SOPs will be later devised. Accordingly, the procedural methods described herein are not verifiable, no opinion may be issued on these in their current condition.

XV. Mine closing, recultivation (Volume 29.)

104. Additional information should be provided in relation to the RMGC (court of registration data, shareholders, capital composition, listing, banks providing the funds, information relating to operation and professional activity until now).

105. The investor is responsible for presenting the appropriate financial guarantees for the costs of the mine's closing. The argument is unacceptable that such costs shall be allocated in the course of mining activity. The creation of a liability insurance system is not discussed either.

106. The presentation of similar financial guarantees is necessary in relation to monitoring in the period following the closing and the management of ARD waste water and escaped water (for a term of at least 30 years or indefinitely, as in many cases).

107. The long term management of acidic subterranean water is not resolved; semi-passive management is not efficient enough in extreme (cold) weather conditions. The contrary to the above should be evidenced with reference results.

108. The costs budgeted for the closing of the mine are unrealistically low (70 million USD – Volume 29, p. 130). No costs have been planned for monitoring and waste water cleaning for the term of operation.

109. The study allows us to conclude that the operator is unable to assume liability in accordance with Directive 2004/35/EC.

110. No financial guarantees are available for the long term operation of the TMF.

111. According to the study, the possibility of revitalization could be established through surface mining activity based on the best available technique (BAT), "but the implementation thereof depends on the decision of the authorities". The message sent by the investor to the Romanian authorities seems to imply that the rehabilitation costs are not charged to the project budget.

112. There is no adequate financial security for emergencies. The EIS does not make any proposals regarding the prevention of the possible consequences of the most severe accident, the depositing of a financial basis serving the restoration of the original condition.

113. The study does not discuss the issue of the barrier layer related to the closing of the TMF. The question arises as to how this is resolved, the insulation used for protection against surface inwash, etc.

114. The condition of the environment will only deteriorate following the termination of mining activity if environmental rehabilitation required following its closing is not implemented.

XVI. Miscellaneous

115. Biological diversity and the chapters on vegetation and the fauna contain few specifics; they do not reflect or falsely reflect the results of the basic studies. The increase in vehicle traffic, too, represents the greatest risk threatening natural values.

116. According to chapter 9.5, there are no protected or endangered plant and animal species in the RMP area, whereas fully protected species do in fact exist in the area, according to the so-called Habitat Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

117. Species of flora are not listed in the chapter on biodiversity.

118. In relation to the listed species, information is lacking on there area of habitat, number and distribution.

119. It is necessary to analyze and evaluate the impact of pollutants emitted into the environment and hazardous to health.

120. The main rules of Directive 1999/31/EC are infringed, e.g. there is no security for the management of environmental and health problems.

XVII. Technical comments related to the EIS

121. The structure of the documentation is complicated, containing frequent cross-references, numerous overlapping, repeated data. Some parts of the material are repeated through several volumes; the numbering of charts and tables is in many places incorrect. Moreover numerous important technical issues remain unanswered, and certain technical solutions are not appropriately substantiated. The documentation is partial, basically exclusively containing positive assessments, lacking any contradictions or points of uncertainty; the possible problems and negative consequences are not investigated in sufficient depth.

122. The quality of the translation of the English language material provided to us on a CD is poor and inadequate; in many cases, the keys, references of the tables, maps and charts are in Romanian in the English version. Some tables and diagrams are not assigned dimensions, rendering these as unintelligible. The CDs did not contain documentation related to the recording of the baseline conditions (Baseline reports 1-6), this could only be downloaded from the websites.

Nr. Crt	QUESTION	ANSWER
001	Various topics are mixed in the baseline report relating to waters, sediments, chemical and biological analyses. The titles of the sections are not in harmony with the content (e.g. the biological and bacteriological section deals with the description of the drainage areas). Parts of the material prepared by various experts are not correlated.	In Vol. 1 – Baseline conditions, the Status of the aquatic environment; 3 distinct reports are presented. The first report refers to the results of the assessment of the baseline biological and bacteriological conditions completed during 1998. The second report refers to the assessment of contaminants in sediments collected from the Rosia Montana area. The third report refers to the results of the water baseline conditions assessment in the Rosia Montana area. The presentation of the conclusions to the water quality monitoring program – which has made reference to underground waters, surface waters and waste waters – has been made for each hydrographic basin in the analyzed habitat.
002	Data relating to the quality of waters, particularly subsurface waters, is deficient; it is difficult to link data with the given period and origin. Frequent reference is made to long data series, but these have been omitted from the report. It is not clear as to which periods are incorporated in the aggregate tables. In general terms, most of the presented data is outdated (e.g.biological data from 1998), it does not reflect current conditions.	The EIA team disagrees that the baseline water quality data are deficient. As noted in the Water Baseline Report (State of the Aquatic Environment, Volume 1), 353 locations (springs, hand-dug wells, bore hole wells, monitoring wells, ARD sources, stream water, domestic water supply sources and lakes) were surveyed and sampled for field parameters during an initial survey. From these 72 suitable and representative locations were selected for long-term monitoring. The 72 locations adequately characterize the baseline water quality both upstream and downstream of the project. The complete list of parameters analysed includes: flow (where relevant), temperature, pH, suspended matter, conductivity, Eh, dissolved oxygen, biochemical oxygen demand (BOD), chemical oxygen demand (COD), turbidity, alkalinity, calcium, magnesium, sodium, potassium, fluoride, chloride, sulphate, bicarbonate, carbonate, nitrate, phosphorus, silica, total and dissolved (T&D) arsenic, T&D cadmium, T&D copper, T&D iron, T&D nickel, T&D lead, T&D zinc, antimony, barium, total chromium, hexavalent chromium, manganese, cobalt, mercury, molybdenum, selenium, phenol, total cyanide, and total dissolved solids (TDS). In addition, the fluvio Sediment Contaminants Baseline Report study (State of the Aquatic Environment, Volume 1) that investigated the extent of downstream impacts to river sediments resulted in 421 water and sediment samples collected between July 2002 and March 2004 at up to 153 sites. Fifteen of the sites were common to the RMGC baseline sites discussed above. In addition to the parameters included in the RMGC baseline sampling, the fluvio study included: lithium, rubidium, caesium, beryllium, strontium, barium, boron, scandium, titanium, vanadium, yttrium, zirconium, niobium, aluminum, gallium, indium, tin, thallium, bismuth, and 13 rare earth elements. The larger analyte suite was key for fluvio's fingerprinting study. In addition, the Biological and Bacteriological Baseline Report study (State of the Aquatic Environment, Volume 1) evaluated three locations in the Rosia Montana valley for a large suite of parameters including many of the same parameters in the RMGC baseline water quality sampling programme, but also including ammonia, nitrite, phenolic compounds, detergents, sulphides, hardness, and biological parameters including coliforms. Because of the large number of samples and parameters the complete database was not presented in the EIA. Instead the Romanian team evaluating and presenting the data for the Water Baseline Report focused on the parameters with specific Romanian regulatory criteria and indicators

		of mining impacted waters. It was felt by the Baseline EIA team that these data were suitable for illustrating the extent of baseline impacts. Nevertheless, we attach the complete datasets used for the EIA study to the Q&A annex in digital format on a CD (not on paper so as to save paper use – but would be sent on paper to any interested part if requested by the Competent Environmental Authority). It must be appreciated that a distinction needs to be made between the baseline data presented for an EIA, where the objective is to identify and define the mitigations required in respect of significant impacts that may be generated by the project; and the baseline data that will be required in the future for operation and compliance purposes (assuming the project is permitted) where for example the requirements of IPPC (Integrated Pollution Prevention and Control) permits will include a wider-ranging parameter list defining the baseline. Because the IPPC permit holder will have to account for divergences from the baseline during the duration of the permit, in those circumstances it is clearly in the holder's interest to analyse for a wide range of elements, including especially EU List I and List II substances, to ensure that they are not held liable for contamination that they were not responsible for. The future monitoring programme will evolve in scope as required to address all regulatory requirements and will be subject to continual review under the Environmental Management Plan (EMP) as new legislation such as the Water Framework Directive is rolled out. Regarding the date of the data: all of it has been considered relevant as there has been not evidence of environmental change in the extensive data set recorded from 1998 to date.
003	The information content of certain determinations is inadequate, e.g. subsurface waters are of a "good condition" - what is the basis for such evaluation?	Such descriptions are commonly used to describe general water quality characteristics as an alternative to Class 1, Class 2 etc. In this case, assuming the question refers to Section 2.3.3 of Chapter 4.1 (Volume 11) of the EIA, the description relates to the comparisons against the Romanian drinking water regulations (Law no 458/2002) and the surface water standards (MO 161/2006), as shown in Exhibit 4.1.10. (chapter 4.1 of the EIA report)
004	In some instances the analyzed periods are short; data series of a few weeks or months are not appropriate for substantiating professionally correct conclusions. The range of analyzed components is not broad enough; some important components are missing (e.g. various forms of cyanide, organic micro-pollutants, etc.).	The above mentioned statement most probably relates to the study of biological and bacteriological baseline report. This is one of the first baseline conditions study and it contains three components: 1. The initial report was prepared in 1998 and its general aim was to assess the impact of surface water contamination on all biological indicators as well as the degree of bacteriologic contamination of the surface and underground waters. The three sampling campaigns (March – May 1998) developed on a monthly basis and the designed monitoring network were considered as relevant due to the following reasons: - The monitoring program of water quality conducted for waters from Roşia Montană Project area included a large number of physical-chemical indicators in compliance with relevant regulations on quality of surface waters) and of drinkable water - The samplings and laboratory assays have been conducted by Târgu-Mureş Hydrochemistry Laboratory, a laboratory under the administration of "Apele Române" (Romanian Waters) National Administration. The laboratory is certified to conduct this kind of assays by the RENAR Romanian Accreditation Association. - The assessment consisted of field data and specific samplings as well as laboratory qualitative and quantitative analysis. The results were processed in compliance with standard methodologies (Târgu-Mureş certified laboratory

		must use procedures based on national standards and regulations) and with assaying methods fully compliant with legal requirements included in national standards or regulations. 2. A subsequent study conducted to establish the baseline ecological conditions was performed (in 2003) for the aquatic environment from the project's area (it is included in the Reports of Baseline Conditions for Roşia Montană Project: Ecological baseline conditions report) which includes samplings and assessments of biotic communities at five stations from the Roşia creek. 3. Those 2 reports prepared in 1998 and in 2003 were updated during the 4th trimester of 2005 and during the 1st trimester of 2006 by the EIA independent team based on the information disclosed by RMGC (the database that includes the qualitative and quantitative monitoring of surface and underground waters, developed between 2000 and 2005). This confirmed the findings of the earlier work. With respect to the fact that certain indicators are missing, we would like to underline that they have been analyzed following the samplings conducted for more than 5 years; no detectable concentrations have been identified according to the provisions of the STAS methodology (this information may be verified in the database that includes the qualitative and quantitative monitoring of the surface and underground waters, which was developed between 2000 and 2005).
005	The investor is responsible for presenting the appropriate financial guarantee for the costs of the mine's closing. The argument is unacceptable that such costs shall be allocated in the course of mining activity. The creation of a liability insurance system is not discussed either.	Information regarding our closure plan, the cost of the program and our Environmental Financial Guarantee ("EFG") are fully discussed in the Environmental Impact Assessment. The closure section can be found in Plan J of Vol. 29 and Plan L of Vol. 31, within the EIA. The EFG is discussed in the section of the EIA titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). An Environmental Financial Guarantee must be in place to receive an operating permit to begin mining operations. An analysis is underway to determine the EFG required during each year of operation. It is updated annually and these updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roşia Montană project. Roşia Montană Gold Corporation ("RMGC") recognizes that mining, while permanently changing some surface topography, represents a temporary use of the land. Thus from the time the mine is constructed, continuing throughout its lifespan, closure-related activities – such as rehabilitating the land and water, and ensuring the safety and stability of the surrounding area – will be incorporated into our operating plans. In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD").

		The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. There are two separate and distinct EFGs under Romanian law. The first, which is updated annually, focuses on covering the projected reclamation costs associated with the operations of the mine in the following year. These costs are of no less than 1.5 percent per year, of total costs, reflective of annual work commitments. The second, also updated annually, sets out the projected costs of the eventual closure of the Roşia Montană mine. The amount of the EFG to cover the final environmental rehabilitation is determined as an annual quota of the value of the environmental rehabilitation works provided within the monitoring program for the post-closure environmental elements. Such program is part of the Technical Program for Mine Closure, a document to be approved by the National Agency for Mineral Resources (“NAMR”). Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals. The current projected closure cost for Roşia Montană is US $76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US $76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.) The annual updates capture the following four variables: • Changes in the project that impact reclamation objectives; • Changes in Romania’s legal framework, including the implementation of EU directives;

		• New technologies that improve the science and practice of reclamation; • Changes in prices for key goods and services associated with reclamation. Once these updates are completed, the new estimated closure costs will be incorporated into RMGC's financial statements and made available to the public. A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include: • Cash deposit; • Trust funds; • Letter of credit; • Surety bonds; • Insurance policy The details of Roşia Montană Gold Corporation's ("RMGC") Environmental Financial Guarantee are discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). In Romania, the creation of an Environmental Financial Guarantee is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD"). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. RMGC has retained one of the world's leading insurance brokers, which is well established in Romania and has a

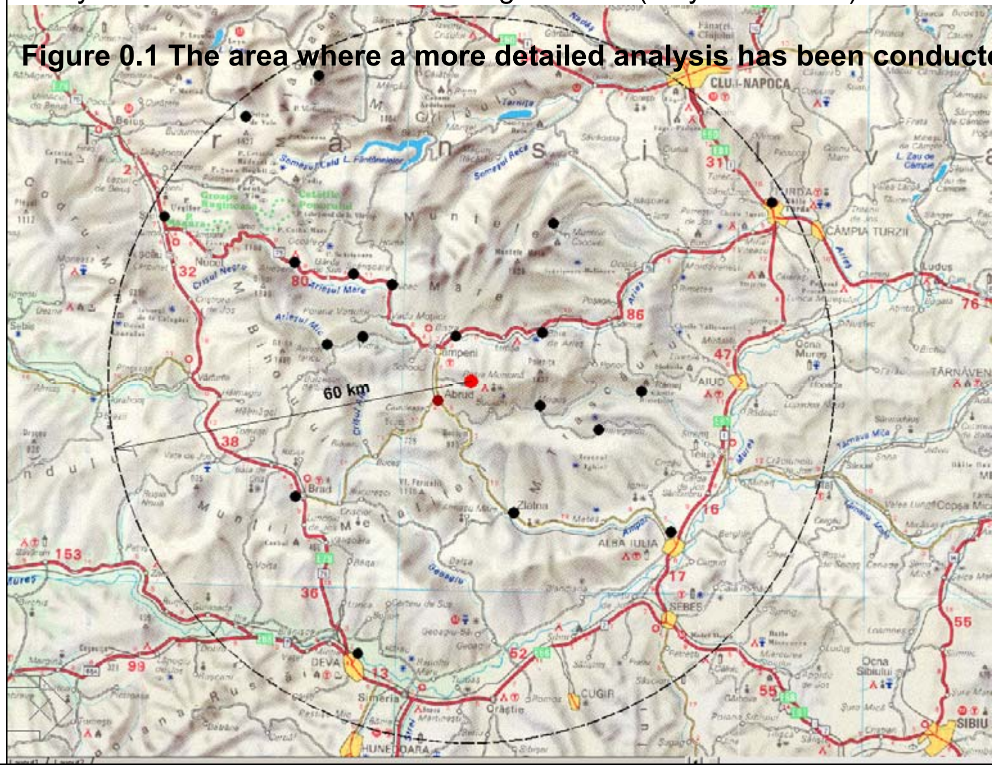
		long and distinguished record of performing risk assessments on mining operations. The broker will use the most appropriate property and machinery breakdown engineers to conduct risk analysis and loss prevention audit activities, during the construction and operations activity at Roşia Montană, to minimize hazards. The broker will then determine the appropriate coverage, and work with A-rated insurance companies to put that program in place on behalf of RMGC, for all periods of the project life from construction through operations and closure. RMGC is committed to maintaining the highest standards of occupational health and safety for its employees and service providers. Our utilization of Best Available Techniques helps us to ensure this goal is achieved. No organization gains from a loss, and to that end we will work to implement engineering solutions to risk, as they are far superior to insurance solutions to risk. Up to 75% of loss risk can be removed during the design and construction phase of a project. Yet we recognize that with a project as large as that being undertaken at Roşia Montană, there is a need to hold comprehensive insurance policies (such policies are also a prerequisite for securing financing from lending institutions). Core coverage includes property, liability, and special purpose (e.g. delayed start up, transportation, non-owned). Thus in the event of legitimate claims against the company, these claims will be paid out by our insurers. All insurers and insurance coverage related to the mining operations at Roşia Montană will be in full compliance with Romania's insurance regulations. The financial guarantees for environmental rehabilitation will be calculated and settled up according to the Mining Law no.85/2003, applicable in present. According to the provisions of the Ming Law no.85/2003, there are two different types of financial guarantees for environmental rehabilitation works which may be applied to the project, as follows: - The financial guarantee to cover the annual value of environmental rehabilitation works; - The financial guarantee for final environmental rehabilitation works. 1). According to art. 131 of the Methodological norm of Mining Law no.85/2003, "the financial guarantee for environmental rehabilitation, in case of an exploitation license, shall be annually constituted, within the first month of the period the guarantee is referring to, and it will be established in the license, so as to cover the environmental rehabilitation works established in the environmental rehabilitation plan and in the technical project." According to art.133 (1) of the Methodological Norms of Mining Law no.85/2003 the value of the financial guarantee cannot be less than the value of the environmental rehabilitation works due for that year, therefore the guarantee should cover the rehabilitation works in case the titleholder ceases the mining activity and does not perform the environmental rehabilitation works. Furthermore, art. 3 of the NAMR Technical instructions of 25.02.2004 provides: "The value of the rehabilitation

		works for the environment that is affected by mining activities results from the documentation (initial plan for closure, environmental rehabilitation plan, technical project and compliance program) presented and undertaken by the economic agents that perform exploration/exploitation mining activities and is declared on own liability, under the sanction imposed by criminal law.” 2). The financial guarantee for final environmental rehabilitation, post closure, according to art. 15 of the NAMR Technical instructions of 25.02.2004 will be annually constituted and calculated as a part from the value of the rehabilitation works, according to the program for monitoring post closure environmental factors, included in the technical and mine closure programs. This annual quota has the same regime as the annual guarantee, but it is separately constituted from the annual financial guarantee for the environmental rehabilitation. Moreover, according the art.22 of Mining Law no.85/2003, starting the mining operation is under condition of creation of the financial guarantee for environmental rehabilitation. Therefore, RMGC has no legal obligation to present or to constitute, during this stage of authorization, the financial guarantees for environmental rehabilitation. Regarding the invoked insurance system, we would like to underline the setting up of such insurance is not provided as a legal obligation under any relevant legal provisions.
006	The analysis does not contain modeling events in relation to changes in underground waters (flow directions, pollution spread, etc.), notwithstanding the fact that there are procedures which can provide even a three dimensional picture of expected changes.	A three-dimensional model for the entire mine site, including the existing underground mine workings, would be a highly complex and data intensive endeavor. While we agree that such a model could provide useful information about the hydrogeologic system and could also be used as a predictive tool to test various operational and closure options for the mine, the level of effort required to create an accurate model that could be fully calibrated would not be practical, and in fact, this level of detail is not needed. Instead, data presented in the Baseline Hydrogeology Report (Vol. 2) and the results of the two-dimensional seepage model and contaminant transport model that were conducted for the TMF (Vol. 25) have been used to develop a three-dimensional understanding of the hydrogeologic setting of the TMF. In the TMF area, the hydrologic system is simple enough that the two-dimensional model provides sufficient information with respect to contaminant transport in the Corna Valley hydrogeologic basin. In the mine area, the hydrogeology is dominated by the hydraulic sink created by the underground mine workings and the mine pits in the future. The hydrologic sink will not drastically change as the result of the mining, so a complex model appears unwarranted. In both valleys, the groundwater flow is focused to the center of the valley then downstream, and groundwater passing beneath project facilities will be captured and managed appropriately. Any seepage that occurs on the abutments (side seepage) of the Tailings Management Facility (TMF) dam will be collected and contained within the secondary containment dam and associated sump. The Hydrogeology Baseline report – based on actual field measurement of groundwater between 2002 and 2005 – indicates that groundwater flow contours are toward the base of Corna Valley. This groundwater flow direction is expected to be maintained

		during the operation and closure of the TMF facility due to the pervious dam concept, which will maintain a low groundwater elevation at the face of the dam. Therefore, any side seepage would be toward the base of the valley, where it can be collected in the secondary containment sump. In addition, the water level in the secondary containment dam sump will be maintained at a very low level. This will create a low point in the groundwater table, a hydraulic sink that will act as a collection point for any groundwater from the TMF and the side slopes of the Corna Valley. Since the base of the secondary containment dam sump will be a hydraulic sump (groundwater inflow), this area does not require a low permeability liner to prevent the outflow of seepage water. Reading Report The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Aries-Mures river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mures joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy

		metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mures River Modelling Program and the full modelling report is presented in **Annex 5.1.**
007	A load test, material balance has not been completed; the degree and spread of subsurface water pollution cannot be accurately determined.	It is not clear what a "load test, material balance" is in the context of potential groundwater impacts. A detailed contaminant transport model for the TMF was conducted and the results are presented in the Tailings Facility Management Plan (Vol. 25). The results of this model indicate the degree and spread of subsurface water pollution within the Corna Valley focusing on cyanide. As is discussed in Vol. 25, any impacted water that seeps trough the tailings dam will be captured in SCD pond and pumped back to the TMF reclaim pond, such the facility is designed as a zero-discharge facility. Subsurface water pollution is not expected anywhere at the project boundaries. During operations the concentration of cyanide within the tailings slurry that is pumped to the Tailings Management Facility (TMF) will be monitored on a weekly basis to confirm it meets all EU Directives and Romanian Governmental Decisions. Monitoring will be independently validated. As part of the initial TMF basin construction, the surface vegetation and top soil will be removed and the clay layer will be compacted to achieve a permeability of 1x10-6 cm/sec or less as is considered compliant with EU Best Available Techniques (BAT) as defined by EU Directive 96/61/EC (IPPC). This layer is designed to provide a barrier to limit seepage into fractures. During removal of the vegetation and topsoil large fractures or other surface feature that could be a potential pathway for seepage migration will be identified. Potential pathways identified will be addressed as appropriate and covered with the natural clay liner to limit seepage. The natural clay liner is designed to BAT (Best Available Techniques) as defined by EU directive. Seepage that extends beyond the tailings dam will be collected in the Secondary Containment Dam and sump. Hydrogeologic baseline studies have indicated that this type of control and containment is viable. Groundwater will be monitored hydraulically downgradient of the TMF and secondary containment to confirm that groundwater is not being contaminated. If tailings contaminated groundwater is detected there is a commitment to implement a third level of containment and collection using extraction wells.

		The feasibility study and the EIA of the Roşia Montană project, which is situated in the Southern Apuseni Mountains included several studies of the possible impact on water, and comprehensive plans have been designed to prevent seepage migration. As part of the initial Tailings Management Facility (TMF) basin construction, the surface vegetation and top soil will be removed and a clay layer – designed to BAT (Best Available Techniques as defined by EU Directive 96/61/EC(IPPC)) – will be compacted to achieve a permeability of 1x10-6 cm/sec or less. In part, this operation is designed to identify any fractures or other surface features that could be a potential pathway for seepage migration. Any potential pathway identified will be backfilled and covered with the natural clay liner to reduce seepage. Other measures are included into the design, such as a low permeability cut-off wall below the TMF dam, and a Secondary Containment Dam and sump, which will collect possibly impacted groundwater that may seep outside of the TMF boundary. The rocks situated under the TMF consist of Cretaceous Age flysch sediments dominated by shales with lesser quantities of sandstones and conglomerates. A couple of small limestone blocks have been identified near the dam alignment. These blocks have been investigated and found to be olistoliths (exotic blocks that slid into the Cretaceous basin). These are isolated blocks rooted in shale, and karst is not a concern associated with this limestone. There is no karst topography similar to the Northern Apuseni Mountains in the TMF or general project area. Studies of the possible impact on water include the *"Water Baseline Stud*y" (Chapter 2), *"Water Impact Assessment Study"* in the potential impacts section of the EIA (Chapter 4, in Sub-Chapter 4.1), and "*Water Management Plan"* (Plan "C"). The planned monitoring of water is included in the "Environmental Monitoring Plan, Plan N, and within the EIA (Report on the Environmental Assesment (EIA)) in chapter 6 of the EIA. It has been found that due to removal or treatment of existing pollution sources, impacts to water outside of the project area will be an improvement to current conditions. The hydrogeologic characterization and model of the Corna Valley are based on surface water monitoring, groundwater monitoring, drilling, test pitting and field mapping programs that were carried out between 2000 and 2005. The model that has been developed and is presented in the EIA (Section 4.1, Section 3.0, the *Hydrogeology Baseline Report* and *TMF Management Plan*) is based on the results of these field studies and is consistent with standard engineering practice for these types of facilities. The studies have been conducted and signed off on by registered and competent engineers suitably qualified to perform this test work, evaluation and studies.

008	The meteorological baseline report has based its assertions on a set of measurements done throughout 2004. Although most of data series contained is related to the timeframe between 1997 and 1998.	In the meteorological baseline report, there have been analyzed the meteorological parameters monitoring data secured during the last 5 years from the RMGC's meteorological station records (located in the close vicinity of plant site). The results secured from the monitoring process conducted for last 20-30 years at the meteorological stations taken into account when we established the Maximum Probable Precipitation respectively. Based on the average value and standard deviations for extreme precipitations occurred within 24h between 1983 and 1998 at 21 stations located within the upstream basin of Arieş River (including Roşia Montană Weather Station), an unitary area has been identified around Roşia Montană site. The 10 stations (Abrud, Albac, Avram Iancu, Baia de Arieş, Bistra-Câmpeni, Mogoş, Ţebea, Zlatna, Alba-Iulia and Deva) have been chosen for the purpose of a more detailed analysis; stations that have shown average annual values for maximum precipitation occurring within 24 h counting 30-45mm and a standard deviation of 10-15mm (see Figure 4.1). The analysis has been conducted considering the annual maximum extreme value for 24h for this area; separate analyses have been conducted during summer (May-November) and winter-spring seasons (December-April).  **Figure 0.1 The area where a more detailed analysis has been conducted** The meteorological baseline study has been prepared for 2004 and was updated by the EIA independent team as a result of the acquisition of the monitoring data secured for the last years from Sibiu Regional Meteorological Center during the period February-March 2006 (some of the primary data is presented in the study's annex). The primary data acquired from INMH and CRMS as well as the ones resulted from the monitoring process of meteorological parameters at RMGC's station may be secured if the environmental authority considers this to be relevant.

		In fact, the Environmental Impact Study encompasses precipitation events from 2000 to 2005. In addition, the Tailings Management Facility (TMF) – the facility most impacted by significant rainfall – has been designed to accommodate much larger rainfall events than occurred in 2005. The year 2005 was characterized by significant precipitation and flood events throughout Romania. However, these events only correlated to events with 100-year, or in some rare cases 200-year return frequencies (i.e., it is probable that rain events of this size occur once every 100 to 200 years). The TMF was designed based on simulated 24-hour, Probable Maximum Flood (PMF) event (an event so extreme it should never occur) derived from estimated probable Maximum Precipitation (PMP) events as defined by the WMO-1986 manual (World Meteorological Organization). In fact, the designs were developed on their ability to hold against two back-to-back PMF events. Rosia Montana will be the first project in Romania to be designed based on the demanding PMF criteria. The hydrogeologic characterization and model of the Corna Valley are based on surface water monitoring, groundwater monitoring, drilling, test pitting and field mapping programs that were carried out between 2000 and 2005. The model that has been developed and is presented in the EIA (Section 4.1, Section 3.0, the Hydrogeology Baseline Report and TMF Management Plan) is based on the results of these field studies and is consistent with standard engineering practice for these types of facilities. The studies have been conducted and signed off on by registered and competent engineers suitably qualified to perform this test work, evaluation and studies.
009	Could you please support with more data the assertion that the mean temperature in this area is 4C from December to March. The Hungarian average values for example, in the same period are in the range of 2 to 4 C.	*The information is taken out of the context and is quoted from* **Chapter 4, Subchapter 4.2, *Air*.** The section **Climate and Meteorological Conditions** clearly indicates the period for which the parameters presented below have been taken into consideration: Roşia Montană area has a continental temperate climate. Higher areas are characterized by a mountain microclimate with cold winters and heavy snowfall lasting 4 to 6 months. Spring and autumn are cold and humid

with significant amounts of rainfall. Summer is short with gradual transitions between seasons.

*Climatic data – temperature, relative humidity, cloudiness, precipitation and wind – have been recorded **from 1988 until 2005** by the Roşia Montană Meteorological Station which is located on the top of Rotundu Hill in the north-eastern corner of the Project site near the upper end of the Roşia Valley.*

Air Temperature

The average multi annual air temperature is 5.5 ^oC (Annex 1). The average annual values of the average minimum temperatures were positive, between 2.1 and 4.0 ^oC (see annex 1 table 4.2.3)

Annex 1 Tabel 4.2.3 Average value of minimum temperatures (^oC)

Year	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	M.A.[2]
1988	-2.2	-4.6	-4.1	0.4	6.8	8.7	13.3	12.5	8.1	3.5	-6.7	-5.9	2.5
1989	-6.4	-4.3	-0.1	5	5.9	8.3	11.7	12	8.1	4.2	-3.1	-5	3.0
1990	-4.9	-1.5	1	2	6.7	9	11.1	12.6	5.3	5.3	0.5	-4.9	3.5
1991	-6.2	-8.2	0.5	0.9	3.4	10.1	12.7	10.9	8.5	2.5	-0.1	-8.9	2.2
1992	-5.9	-6.9	-3.3	2.3	6	10.1	12	16	7.4	2.5	-1.6	-5.4	2.8
1993	-6.3	-8.6	-4.2	1.1	8.2	9.5	10.4	12.6	7.1	6.4	-2.9	-3.7	2.5
1994	-2.9	-4.3	-1.2	2.8	6.8	10.1	13.5	12.4	12.1	2.8	-0.6	-5	3.9
1995	-7.9	-2.7	-3.2	0.7	6	9.7	13.9	11.4	6.7	6.1	-3.9	-4.5	2.7
1996	-5.7	-7.4	-6.9	1.9	8.7	11	10.1	11.7	4.6	3.9	1.5	-4.7	2.4
1997	-4.3	-5.6	-4.4	-2.7	7.2	10.2	10.5	11	6.8	0.6	0.3	-3.9	2.1
1998	-4.2	-3.2	-6.8	2.9	5.9	10.6	11.8	12.1	7.4	4.6	-3.7	-7.4	2.5
1999	-3.0	-8.2	-2.4	2.9	6.2	11.6	13.7	12.1	9.9	3.7	-2.0	-5.2	3.3
2000	-10.1	-5.5	-4.4	4.9	8.5	11.2	11.1	14.0	7.8	6.8	4.6	-1.1	4.0
2001	-4.0	-4.8	0.0	2.2	7.7	8.4	12.7	13.9	7.1	6.8	-4.0	-10.1	3.0
2002	-6.2	-1.9	-0.7	1.9	9.4	11.2	13.6	12.2	7.8	3.0	2.3	-6.0	3.9
2003	-6.9	-9.8	-4.0	0.3	11.2	12.4	11.9	14.2	8.1	0.9	1.9	-4.0	3.0
2004	-9.1	-6.7	-3	3.4	5.3	9.8	12.1	12.0	7.6	5.7	-0.6	-3.9	2.7
2005	-6.7	-8.2	-6.0	2.4	7.5	9.0	12.1	11.8	10.0	4.3	-1.4	-5.5	2.4
M.L.[1]	-5.7	-5.7	-3.0	2.0	7.1	10.1	12.1	12.5	7.8	4.1	-1.1	-5.3	3.1

1 Multi annual monthly average value

2 Yearly value

010

The expected temperature conditions are not sufficiently taken into account (e.g. the significance of monthly average temperatures in the course of the cyanide dissociation process, risk of freezing surface pipelines).

Chapter 4 section 4.2 (annex 1 baseline data) explains in detail which period and which indicators have been taken into consideration in order to model the pollutants' dispersion. The meteorological data – air temperature, relative humidity, total nebulosity, rainfall and wind – have been registered during the years 1988 and 2005 at the Rosia Montana meteorological station, located on the top of the Rotundu hill, at about 2 km North-East from the Project area, close to the Rosia valley's springs. No data on solar radiation are available from this station, as this parameter does not belong to the measurement program. The Station belongs to National Administration of Meteorology and it is also a member of National Meteorological Observations Network. The data presented in the work have been supplied by the National Administration of Meteorology. The data regarding the daily sunshine duration (sun exposure) have been recorded throughout the years 2002 and 2005 at the RMGC meteorological station.

In order to assess the potential impact caused by cyanide volatilisation into HCN, from the area of the carbon in leach (CIL) tanks and of the decantation tank, located in the processing plant, as well as from the TMF area. A distinct survey for the modelling of the atmospheric dispersion has been performed. The results are being presented in the enclosed exhibits.

The dispersions in the atmosphere of the hydrogen cyanide (HCN) releases as a consequence of the Rosia Montana Project have been modelled and assessed. Such releases derive from two primary sources: the TMF and the area of the processing plant, in particular the CIL tanks and the tailing thickener.

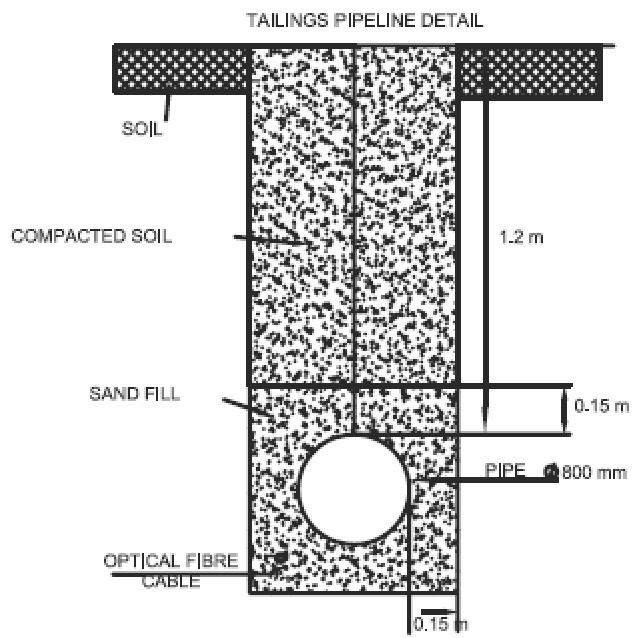
Both the evolution of the TMF surface and the effects of the climatic conditions have been taken into account. The average area of the TMF is estimated at about 300,274 sq m. The model has taken into account two seasonal conditions. The first one, a summer scenario, which employed the entire TMF surface area and a more intense release rate, due to the higher temperatures. The more intense volatilisation rate is supposed to be 1,5 times the annual rate, in order to take into account the higher temperatures, which lead to an augmented volatilisation speed. In the second case 50% of the TMF surface area is taken into account, in order consider the ice layer and a volatilisation speed of 50% of the average annual rate. The specific parameters which are employed are centralized in Table 4.2-38.

Table 4.2-1. Summary of the HCN emission parameters employed in the modelling of the dispersion from the TMF

Season	Area of release (m^2)	Release rate ($mg/h/m^2$)	Release rate ($g/s/m^2$)	Total releases for the 6 months period (tonnes)
Summer	300,274	17.0	$4,72x10^{-6}$	22.4
Winter	150,137	11.6	$3,22x10^{-6}$	7.6
Total annual				30.0

The modelling of the atmospheric dispersion has been achieved by employing the best available techniques, in

		order to simulate the transportation of the pollutants generated by the mining activities, outside the project's area. AERMOD incorporates, by means of a new and simple approach, the recent concepts regarding the seepage and the dispersion in irregular relief structures. Should this be necessary, the dispersion direction is modelled either by a trajectory which has impact with the land, or by a trajectory which follows closely the land's topography. This approach has been conceived as being realistic from the physical point of view, easy to implement, avoiding the need to make a distinction between simple, average and complex topographies, as requested by the regulations in force. American Meteorologic Society – AMS and the United States Environmental Protection Agency (US EPA) have elaborated a regular model AMS/EPA (AERMOD) which incorporates these modifications. This model has been selected in order to assess the impact generated by the mining operations, due to: 1) the efficient employment of the local meteorological data sampled each hour; 2) the ability to calculate short and long-term concentrations from multiple sources of various types; 3) abilities to incorporate topographic localized data in order to assess the impact upon some irregular relief structures; 4) public availabilities of this system, already validated by means of various experimental programs. The AERMOD modelling system includes three components; AERMET, version 99211 (the AERMOD meteorological pre-processor), AERMAP, version 99211 (the AERMOD topographic pre-processor) and AERMOD, version 99351 (for dispersion modelling). The hourly meteorological data have been obtained from the National Administration of Meteorology The meteorological measurement with hourly frequency have been employed in the AERMET program for the generation of input data corresponding to the dispersion model (both the parameters of the high atmospheric layer and the surface parameters). The set of processed meteorological data has been analysed in terms of accuracy. AERMOD may forecast the concentrations of pollutants from multiple sources for a large variety of sites, meteorological conditions, types of pollutants and mediation time spans. For this project, short-term concentrations have been calculated employing the maximum release rates per hour for activities performed simultaneously and for calculated averages for intervals such as 1 hour, 8 hours and 24 hours. The annual concentrations have been modelled by using all the sources that have been active during that particular year. Annex 1, chapter 4, section 4.2 includes tables with the meteorological parameters which have constituted the input data of the dispersion model. The anti-freezing protection of the water reuse pipeline system from the floating barge and the pipelines from the processing plant are details which will be presented in the technical designs. The Report on the Environmental Impact Assessment, as it is stipulated by the legislation in force, does not have as an purpose the specific approach of such aspects. Nevertheless in order to avoid any accidental situation in the detail design of the tailings pipeline the designer has included the following details to avoid freezing conditions. The secondary pipeline sector piping the processing tailings from the intermediate end basin to the unique North discharge location is made of HDPE SDR 17(PE 100) and is 1655m long with the outer diameter of 800mm and wall thickness of 47.1 mm. To protect the main pipe , two energy dissipation sectors are required, respectively the diminution of the tailings slurry flow-rate.

		One of these energy dissipation sectors will be placed ahead of the intermediate end basin, prior to the connection with the distribution pipeline from the dam crest of wave. As for the laying down method, each sector will be mostly buried beneath the froast depth (1.2m) and it will be mounted at surface only where the land configuration does not allow otherwise. For the latter, the pipe will be laid down in a channel with foil insulation on a sand layer to prevent the accidental infiltration in the underground and it will be also thermally insulated to prevent freezing during the cold season. 
011	The geological baseline recordings are deficient; no recordings were made on the location of important facilities, such as temporary hazardous waste sites, temporary	All locations for facilities have been tested with the appropriate level of core drilling, geophysical surveying, and test pitting, with rock core samples collected as well as soil samples for geotechnical test work. All of this work is covered under the feasibility and engineering study and the results are used for the design of the facilities. The results of this were used for the EIA, but not all the details for all drill holes, test pits, surveys and test work are reported in the EIA, as this is outside the scope of the EIA. In total, 221 geotechnical drill holes have been

	ore storage facilities, existing mining facilities.	completed, for 9357.42 metres of core, and 172 test pits have been created. In addition, 886 other drill holes have been drilled, for 127,195.74 metres, to test the various aspects of the project, including geotechnical aspects and data, and approximately 70,000m of underground workings have also been geotechnically logged and tested. The details of this work are included in the feasibility study.
012	The impact study does not provide enough information on old mines; existing facilities located at the site of the investment, thus the possible changes cannot be followed through. The material should be supplemented with plans relating to the rehabilitation of the old mines. 1.	The Environmental Impact Assessment (EIA) provides much detail on the old mine. This has been considered by the EIA experts more than sufficient to complete the aim of the EIA which is to assess the impacts of the new proposed project on the existing environment. To be more specific: The baseline conditions are described in eleven reports containing a detailed analysis of the conditions related to the environment, heritage and population health on site and inside the project impact area. These reports are included in Volumes 1-6 of the documentation submitted to the Ministry of Environment and Water Management on May 15, 2006. This document includes three large sections: • The abovementioned baseline reports – volumes 1- 6; • The Report on the Environmental Impact Assessment Study (EIA) – volumes 7-20 containing, in each chapter/section, a brief presentation of the baselines based on which the impact assessment was conducted, for the purpose of estimating and measuring the potential impact (note that the geological section has details on the existing underground galleries network produced by previous mining); • The Management Plans from A to M included in volumes 21- 33, present the measures proposed for the prevention/mitigation/elimination of the potential impact of the Rosia Montana project. According to the legal provisions in force (Government Decision no. 918/2002 abrogated by Government Decision no. 1213/2006 and Ministerial Orders no. 860 /2002 and no. 863/2002, as subsequently amended and supplemented) transposing the Environmental Impact Assessment Directive 85/337/EEC, Rosia Montana Gold Corporation (RMGC) had only the obligation to submit the EIA Report. For more detail on the facilities at the old mine site the reader is reminded that this falls under the jurisdiction of RosiaMin. The old mine is undergoing conservation design as required by legislation. RosiaMin has prepared a “cessation action plan” that needs to be endorsed through a Governmental Decision in order to assign the necessary funds to prepare the design (“closure technical project”) of a Mine Closure and Rehabilitation Plan. After this design is approved and endorsed, the necessary funds will be budgeted for the development of specific closure and rehabilitation works. In this plan all existing facilities will be documented. Taking into account the national strategy prepared for the mining sector for 2004-2010 that adopts to goal of “*privatization of deposits that may be economically developed and closure of those under the economic limit* “, and that the largest gold deposit from Europe exists in Rosia Montana, an optimum solution to reinvigorate the regional

		economy must consider not just the closure but also the re-development of the Rosia Montana mine site. RMGC has committed to do this in conformity with the Romanian legislation, the European Union directives, BAT (Best Available Techniques), BMP (Best Management Practice) and international guidelines and recommendations. The result of this commitment is contained in the EIA documentation which contains, in addition to the EIA Report, the Baseline Reports prepared during the period 1999-2006 and the Management Plans prepared as part of the environmental impact assessment process. Also included in this report is an estimation of a closure project for the old mine. This Estimation is entitled "Zero Alternative Report" and is prepared by WISUTEC/WISMUT, Germany. It concludes that to address the old mine situation approximately €20 million and around €1 million per annum of ongoing costs for water treatment (effluents from the existing mine), monitoring and maintenance) would need to be spent. All together all of this adds up to a lot of information concerning the old mine.
013	With regard to the water balance of the area, it is not analyzed as to how much water is to be removed prior to the commencement of mining and what will happen to the presumably polluted water.	The primary receiving streams for unimpacted water will be the Roşia Stream and Corna Stream. The North and South Storm Water Diversions at the TMF will both discharge into Corna Valley immediately downstream of the Secondary Containment System. The Northern Roşia Valley Diversion Channel extending from the northern flank of the valley will discharge into Roşia Stream immediately downstream of the Cetate Water Catchment Dam and Pond. The diversion channels will be constructed during the construction phase to minimise the volume of clean surface water entering disturbed areas of the site. These diversion channels will be intended to convey water that is not impacted by historical or proposed mining activities. The diversions will reduce the volume of clean water and storm water mixing with possibly site-impacted waters requiring treatment in the mine area, thus reducing the overall treatment requirements and helping to provide for the biological baseflows in downstream streams. An additional objective of the diversions includes protecting structures, stockpiles and active areas from flood flows. Impacts to surface water flows will occur due to direct interception and containment of contaminated and uncontaminated surface water flows by structures constructed during the implementation of the Project. These structures include the Cetate Water Catchment Dam and the mine pits, with their associated diversion channels in the Roşia Valley; and the TMF and SCD with their associated diversion channels in the Corna Valley.

		Further drainage will be diverted from waste rock dumps in both valleys, from the old mine wastes and low grade ore stockpile and the 714 adit in the Roşia Valley from the operations area. The net result will be the potential to impact the flows in the Roşia and Corna streams and therefore also the Abrud and ultimately the Aries rivers. Wherever possible, clean water will be diverted around the facilities to the respective catchments downstream of the Project area, without loss of flow – and so any residual impact on surface water flows in the downstream system will be mainly in respect of loss of contaminated water only. The Project intercepts contaminated water from the Roşia and Corna catchments while diverting as much clean surface water as possible for return to the streams. Nevertheless, some of the treated water from the ARD waste water treatment plant is discharged back to the streams as compensation flow. This amount averages 237.42 m3/hr (66 L/s) over the operational life of the mine (Exhibit 4.1.12, stream 35 of the EIA). This is less than the average baseline flows which total 309.3 m3/hr (85.9 L/s), although it does not include diverted clean water flows. The apparent reduction in flow in the two streams (71.9 m3/hr, 20 L/s) is accounted for almost exactly by the intercepted mine water flows which together total 67.3m3/hr (18.7 L/s) – so the 23% (maximum) reduction in flow is offset by the removal of the most contaminated component. The impact on the River Abrud of the 71.9 m3/hr (20 l/s) reduction is negligible – about 1.4% of its total average flow. Moreover, the Project is committed to maintaining minimum flows in the Roşia and Corna streams of 72m3/hr (20 L/s) and 25.2 m3/hr (7 L/s) respectively. These are the estimated biological compensation baseflows which will be conducive to ecological sustainability when the streams have recovered sufficiently in quality terms to support aquatic fauna and flora. In the case of the Roşia stream lower flows than this minimum flow have already been recorded (see baseline data between 2000 and 2005).
014	It is unacceptable that an accurate geological recording was not made in relation to the Corna valley tailings management facility (TMF) and the survey was conducted 150 meters lower. This may be important with regard to the accurate knowledge of the faults in the valley. The special characteristics of these must be available to decide whether foil	The hydrogeology of the Project area has been evaluated through extensive drilling programs conducted at the site between 2000 and 2003 (to support the EIA studies). These included boreholes along the centerline of the Corna Valley TMF dam and the secondary containment dam and sump. In addition, it included borings and test pits within the TMF basin to characterize the near surface soils. Further investigation studies on the continuity, thickness and permeability characteristics of the near surface soils within the basin are ongoing as of March 2007 (to support detailed design studies). These are specifically focused on determining the requirements for constructing a low permeability soil layer throughout the TMF basin in the Corna Valley. In addition, hydrogeologic evaluation has shown that the groundwater is relatively shallow, mirroring the ground surface topography up to the ridge tops. This indicates low permeability subsurface geological and provides a

	insulation is needed underneath the storage facility.	natural containment system. To make the facility even more robust and provide additional redundancy, the design includes recompaction of the surface colluvial layer to achieve a permeability of 1x10-6 cm/sec or less which conforms with EU Best Available Techniques as defined by EU Directive (96/61/EC). This will reduce the potential for seepage out of the TMF. For the geotechnical investigation all locations for facilities have been tested with the appropriate level of core drilling, geophysical surveying, and test pitting with rock core samples collected as well as soil samples for geotechnical test work. All of this is work is covered under the feasibility and engineering study, with the results used for the design of the facilities. The results of this were used for the EIA but not all of the details for all drill holes, test pits, surveys and test work are reported in the EIA as this is outside its scope. In total 259 geotechnical drill holes have been completed for 10,731.22 metres of core as well as 232 test pits. In addition 886 other drill holes to test the various aspects of the project including geotechnical aspects and data have been drilled for 127,195.74 metres and approximately 70,000 meters of underground workings have also been geotechnically logged and tested. The details of this work are included in the feasibility study.
015	The material does not indicate the type of hydro-geological model used and basic data is unavailable, therefore results derived from the model cannot be verified.	The only quantitative hydrogeological modeling that was conducted was the seepage model that was conducted for the TMF and SCD. The results of this modeling are presented in the Tailings Management Facility Plan, Volume 25 of the EIA, and in Volume 8, Chapter 2, Technological Processes, Section 4.1.4. The seepage model was conducted using Geo-Slope International Ltd., SEEP/W v.5.1 Computer Program. The specific data used beyond that presented in the EIA are contained in the engineering documents referred the text cited above. In addition, a conceptual hydrogeological model has been developed and is summarized in the Hydrogeology Baseline Report (Volume 2). This model is qualitativ.The hydrogeologic characterization and model of the Corna Valley are based on surface water monitoring, groundwater monitoring, drilling, test pitting and field mapping programs that were carried out between 2000 and 2005. The model that has been developed and is presented in the EIA (Section 4.1, Section 3.0, the Hydrogeology Baseline Report and TMF Management Plan) is based on the results of these field studies and is consistent with standard engineering practice for these types of facilities. The studies have been conducted and signed off on by registered and competent engineers suitably qualified to perform this test work, evaluation and studies.
016	The baseline descriptions like geological, water balance related risks, environmental impacts, etc., mentioned in the previous chapters are repeated in this study. Why are the seismological results found among technical details?	The seismological characterization of the site is a very important consideration for the design of the tailings dam structure. Clearly the risk of dam failure arising from an earthquake event will concern project stakeholders and this is why the subject is highlighted in the EIA Study Report. Similarly, other baseline conditions that are key to the design of the project are highlighted and discussed to aid understanding by non specialists.
017	Several references are made to	Chapter 2 of the EIA Study report contains reference to studies that are important in the consideration of the

	studies which were not mentioned previously, e.g. in relation to hydrogeology.	design of the Project. These studies have less, or no relevance to the assessment of environmental impact. The studies that are important to impact assessment are referenced in Chapter 4. For example, in relation to hydrogeology, this is covered in Section 2.3 of Chapter 4.1 of the EIA (Volume 11) and the Hydrogeology Baseline Report (Baseline Reports Volume 2) which was submitted as part of the EIA documentation. Other submitted reports relating to water included the Biological and Bacteriological Baseline Report, the Sediment Contaminants Baseline Report and the Water Baseline Report, all three of which are contained in Baseline Reports Volume 1, State of the Aquatic Environment; and the Water and Erosion Control Management Plan.
018	According to the technological specifications, the TMF was put 250 meters higher and the second dam 400 meters higher. Previously 150 m was specified. Which is the real value? Has the planned final location of the dam been realistically recorded?	The sources of the numbers discussed in the comment are uncertain. However, to provide some clarity as to the location of the TMF it should be noted that steps in locating the dam have included studies to select the preferred location considering a broad range of technical, social, economic, and environmental factors, including resettlement, and detailed technical evaluations to optimize the position and design. Since 1999, several studies were conducted to identify and evaluate alternative TMF sites, considering a broad range of technical, social, economic, and environmental factors, including resettlement. The initial TMF options study was undertaken as part of the initial Definitive Feasibility Study in 2001 and this identified nine sites within four valleys in the vicinity of the Rosia Montana project site. During 2002, RMGC conducted a separate value engineering study, which considered the sites evaluated previously, as well as some new alternatives for the location of the proposed TMF. The EIA evaluated these nine sites in the four valleys identified in the 2001 Definitive Feasibility Study as well as six potential alternatives for storage evaluated in 2002. These alternatives are described in Volume 16, Chapter 5, Alternative Analyses, Section 3, Tailings Management Location Alternatives. The impact analysis has identified Corna Valley as the preferred site for the TMF. Once the location in the Corna Valley was selected, specific geologic and geotechnical studies were conducted and design alternatives were evaluated. Through the engineering process several dam configurations were evaluated. These dam configurations optimize various components, such as dam material quantities and tailings storage volume. The position and dimensions presented in the Tailings Facility Management Plan, Plan F and Chapter 2, Technological Processes of the EIA are reasonably accurate for the current phase of the project. It should be noted that some slight changes might yet occur as the result of final engineering prior to construction. However, these changes would be slight and associated with minor position or configuration changes within the same approximate TMF footprint and overall configuration. The major design criteria such as two PMF' s (probable maximum flood's) flood volume storage will not change, nor will the overall design features. A source of potential confusion may be that three dam designs were present in the EIA associated with the TMF. These include the Secondary Containment Dam (SCD), the Starter Dam, and the TMF embankment (dam). The SCD is a separate structure located downstream of the TMF. The Starter Dam is part of the final TMF, but is of different design because it will contain water for a brief period during start up of the project. Once the project begins, the Starter Dam becomes the core of the TMF embankment. As presented in the Tailings Facility Management Plan, Plan F and Chapter 2, Technological Processes of the EIA, TMF dam raises above the starter dam will be constructed up to 185 m of total dam height. Obvious concerns due to the location of

		the TMF relate to the immediate down-gradient community but RMGC has addressed these concerns related to a dam failure due to an extreme climatic event by increasing the dam height of 185 m in order to provide sufficient storage capacity for two probable maximum precipitation events according to modelling results. This extra capacity does increase the dam height from the original proposed design; however, the increased height also reduces the risk to down gradient communities.
019	The list of chemical substances, fuels and explosives used in the technological process should be supplemented. The operational material balance has been omitted, thus we are unaware of the precise quantity and type of poisonous materials used in the technological process.	The main list of reagents used in the process is provided in Table 2-40 of Chapter 2 – Technological Process. The only reagent that was omitted from this table (which was an oversight) was ammonium nitrate, used to produce the ANFO mixture that is used as explosive. Petroleum products in Table 2-40 group together fuel oil, lubricants, gasoline, greases, etc. Tables 1-1 and 1-2 from Chapter 1 General Information provides a break down of the petroleum products to be used in the project for average year. In addition Table 4-10-1 of Chapter 4 subsection 4.10 Transport provides the annual tonnage of all reagents to be used and also includes waste materials to be produced by the project. With reference to the detailed material balances these can be found in Engineering Feasibility Study and usually are not included in the ESIA documentation as these will increase further the size of the documentation provided and up to a point defeats the point of an ESIA which is to provide a clear concise presentation of significant environmental issues.
020	The material does not analyze the impact mechanism of the pollutants (cyanides, heavy metals) applied by the technology, the occurrence and management of possible hazardous situations caused by these.	The EIA Study Report provides a very full assessment of the potential impacts to air, water and soils arising from gaseous, liquid and solid emissions. The mitigation methods are described in detail and the relevant management plans are appended to the report. In regard to cyanide and heavy metals, it is demonstrated that the application of BAT and adherence to the EU mining wastes directive mean that there will be no significant contamination impact under normal operating conditions, as well as under foreseeable abnormal conditions, viz, earthquake or flood. Indeed, the project is designed to improve the water quality of local streams because pollution from existing mine wastes and workings will be intercepted and treated. Furthermore, the closure strategy is designed to ensure that this beneficial impact is retained in the long ter. Concerning the occurrence and management of hazardous situations potentially caused by the contaminants that are specific to the technology used for the Roşia Montană Project under abnormal operational conditions (e.g. accidents), in Chapter 7 Risks of the EIA, subchapter 4 identifies and describes possible accident scenarios, also including the hazardous situations, as well as potential dangers caused by these contaminants. Table 7.17 contains information both on the potential impact and on the prevention measures taken into consideration. Also, subchapter 7.3 presents “Specific Intervention Procedures” in case of possible accidents involving these pollutants.
021	The cyanide balance is questionable; the quantity dissociated into air, in the tailings and emitted in comparison to the received quantity.	The cyanide mass balance modelling is necessarily semi-quantitative until actual solution and air concentrations can be obtained from the operating process. The model was developed using the available information from the process design, cyanide degradation modelling and other available sources including analogous sites with similar processes. Giving its limitations, the mass balance adequately identifies and estimates the most significant components to the cyanide balance and illustrates the fate of cyanide in the process and TMF. The estimation of the mass balance in the TMF and associated dispersion into air is relatively simple in principal. The flow of tailings

		and cyanide concentration in that flow is reasonably known. It is considered that the total concentration of cyanide would be 7 mg/L coming out of the cyanide detoxification unit. This assumes a WAD cyanide concentration in the range of 4 to 6 mg/L. Based on the discharge rate and the concentration it is estimated that the TMF will receive approximately 97 tonnes/year total cyanide. Based on the pore volume of the tailings, approximately one-third of this will be retained in the tailings, and 66 tonnes/year will be contained in the TMF pond. Cyanide degradation is in tailings ponds is a well-documented process. Much of the degradation is actually volatilization. It is commonly stated that 90 percent is volatilization with the remainder other chemical processed (90 percent is conservatively high). This process was specifically modelled for the project as summarized in Section 4.1.4.8 in Volume 8, Chapter 2 Technological Processes. Based on this modelling approximately one-half of the cyanide is loss to degradation during the year. If it is assumed that 90 percent of this is due to air emissions, then this results in approximately 30 tonnes/year being loss to the air. The cyanide mass balance model is discussed in more detail, with backup for the assumptions, in Volume 8, Chapter 2 Technological Processes, Section 4.1.3. While there are a number of assumptions in the TMF cyanide mass balance, the numbers are approximate averages in relatively narrow ranges. There will be deviations from this but at this time the mass balance is as accurate as reasonable for this stage of the project. One of the most likely deviations will be lower levels of cyanide discharged to the TMF. Conservatively high concentrations coming out of the cyanide detoxification process have been assumed for this stage of the project. The Inco SO2/Air process selected for cyanide detoxification routinely produced WAD cyanide concentrations less than 2 mg/L. Obviously, if lower discharge concentrations are obtained, cyanide air emissions from the TMF will occur.
022	The risk of the spread of toxic aerosols and the occurrence of "cyanide rain" is not adequately taken into consideration.	The hydrogen cyanide (HCN) emissions from the project were modeled as summarized in Volume 12, Chapter 4.2 Air. Dispersion of HCN was modeled using the AERMOD Version 99351 model. -EPA, 2004. User's Guide for the AMS/EPA Regulatory Model – AERMOD. EPA-454/B-03-001. Also see - http://www.epa.gov/scram001/dispersion_prefrec.htm#aermod Concentrations in air were found to be orders of magnitude less than relevant air quality guidelines. The occurrence of "cyanide rain" was investigated and as well methods to estimate such an occurrence. It was found that "rainout" is a very small component of the fate of HCN dispersed in air and was not a concern given the range of concentrations predicted for the project. References related to this process include: -Cicerone, R.J., and Zellner, R., 1983. The atmospheric chemistry of hydrogen cyanide (HCN). Journal of Geophysical Research, vol. 88, no. C15, pp. 10,689 – 10,696. -Mudder, T.I., Botz, M.M., and Smith A., 2001. Chemistry and Treatment of Cyanidation Wastes, Second Edition. Mining Journal Books, Ltd., London, 373 p. It is stated precisely that a "cyanide rain" phenomenon will not exist. Neither was encountered in other places or situations. Moreover, the specialty literature doesn't mention the so-called "cyanide rains" phenomenon, but only "acidic rains" phenomenon which can't be generated by the cyanic compounds breaking down in the atmosphere. The reasons for making the statement that 'cyanide rains' phenomenon won't occur are the followings:

		- The sodium cyanide handling, from the unloading from the supplying trucks up to the processing tailings discharge onto the tailings management facility, will be carried out only in liquid form, represented by alkaline solutions of high pH value (higher than 10.5 – 11.0) having different sodium cyanide concentrations. The alkalinity of these solutions has the purpose to maintain the cyanide under the form of cyan ions (CN^-) and to avoid the hydrocyanic acid formation (HCN), phenomenon that occurs only within environments of low pH; - The cyanide volatilization from a certain solution cannot occur under the form of free cyanides, but only under the form of HCN; - The handling and storage of the sodium cyanide solutions will take place only by means of some closed systems; the only areas/plants where the HCN can occur and volatilize into air, at low emission percentage, are the leaching tanks and slurry thickener, as well the tailings management facility for the processing tailings; - The HCN emissions from the surface of the above mentioned tanks and from the tailings management facility surface can occur as a result of the pH decrease within the superficial layers of the solutions (that helps the HCN to form) and of the desorption (volatilization in air) of this compound; - The cyanide concentrations within the handled solutions will decrease from 300 mg/L within the leaching tanks up to 7 mg/L (total cyanide) at the discharge point into the tailings management facility. The drastic reduction of the cyanide concentrations for discharging into the Tailings Management Facility (TMF) will be done by the detoxification system; - The knowledge of the cyanide chemistry and on the grounds of the past experience, we estimated the following possible HCN emissions into air: 6 t/year from the leaching tanks, 13 t/year from the slurry thickener and 30 t/year (22.4 t, respectively 17 $mg/h/m^2$ during the hot season and 7.6 t, respectively 11.6 $mg/h/m^2$ during the cold season) from the tailings management facility surface, which totals 134.2 kg/day of HCN emission; - Once released into air, the hydrocyanic acid is subject to certain chemical reactions at low pressure, resulting ammonia; - The mathematical modeling of the HCN concentrations within the ambient air (if the HCN released in the air is not subject to chemical reactions) emphasized the highest concentrations being at the ground level, within the industrial site namely within the area of the tailings management facility and within a certain area near the processing plant. The maximum concentration is of 382 $\mu g/m^3/h$; - The highest HCN concentrations within the ambient air will be 2.6 times lower than the standard value stipulated by the national legislation for occupational safety; - The HCN concentrations within the ambient air in the populated areas close by the industrial site will be of 4 to 80 $\mu g/m^3$, more than 250 – 12.5 times lower than standard value stipulated by the national legislation for occupational safety – the national legislation and European Union (EU) legislation on the Air Quality don't stipulate standard values for the population's health protection; - Once released in air, the evolution of the HCN implies an insignificant component resulted from the

		reactions while liquid (water vapors and rain drops). The reactions are due to HCN being weak water-soluble at partially low pressures (feature of the gases released in open air), and the rain not effectively reducing the concentrations in the air (Mudder, et al., 2001; Cicerone and Zellner, 1983); - The probability that the HCN concentration value contained by rainfalls within and outside the footprint of the Project be significantly higher than the background values (0.2 ppb) is extremely low. Details referring to the use of cyanide in the technological processes, to the cyanides balance as well as to the cyanide emission and the impact of the cyanides on the air quality are contained in the Environmental Impact Assessment (EIA) Report, Chapter 2, Subchapter 4.1 and Subchapter 4.2 (Section 4.2.3).
023	Similarly to the other documents, the chapter discussing waste basically repeats and recapitulates determinations contained in other volumes of the impact study document. Risks inherent to waste, however, are judged negligible compared to other risks related to the operation of the mine	**As to the repetition of large parts of content in both documents**: This statement addresses the repetition of large parts of Chapter 3 (Waste) of the EIA Report in the Waste Management Plan (Plan B). This is correct up to a point: Plan B contains not only a reproduction of the Chapter 3 (Waste) of the EIA Report, but also specific information which belongs in a Management Plan such as responsibilities, management tasks and the embedding of the Plan into the overall scheme of Environmental and Social Management Plans of the entire project, in addition to other new information. It is correct that most of the Plan B reproduces Chapter 3 of the EIA. First of all, both documents deal with the same topic (Waste), both are dedicated to the questions of how waste materials impact the environment, health etc., and how these impacts can be minimized or mitigated. They arise from two different legal backgrounds: The Waste Management Plan (B) is required under the EU Mine Waste Directive 2006/21/EC, Article 5. It stipulates that the operator must draw up a Waste Management Plan, which must comply with a certain formal structure and content. Chapter 3 (Waste) of the EIA Report is required as part of an EIA Report according to Ministerial Order MO 863/2002 of Romania. Annex 2, Part II to this Order defines the content and structure of this particular Chapter. Both legal frameworks overlap significantly. Content and structure are very similar in both documents (except that the Management Plan must contain the additional information described above) so that it makes sense to use large parts of one document in the preparation of the other. **As to the Risks inherent to waste which are allegedly judged negligible compared to other risks related to the operation of the mine:** This assertion is incorrect. No such statement could be found in the EIA Report and Management Plans which would imply that the other risks of the mine operation are considered more important than the safe operation of the mining and milling waste facilities. No statement could be found either which implies that the risks are negligible in the sense that they don't deserve attention. What is said, however, is that if the waste management facilities (the TMF in particular) are managed properly and according to Best Practice, the risks are very, very low and acceptable. In the Waste Management Plan, the risks are described and evaluated according to their importance. It is clearly stated that the TMF constitutes a Category A facility under Annex III of the Mine Waste Directive and is subject to

		the regulations of the Seveso II Directive. Because RMGC is well aware of the importance of a safe operation of such a facility, Management Plans (with subordinated Standard Operation Procedures) have been prepared, such as: • Accident prevention concept, safety control system, internal and external emergency plan (Article 6) has been prepared: Emergency Preparation and Spill Contingency Management Plan - Plan I Construction and control of waste management facilities (Article 11 - e.g. minimization of damage caused in the landscape, reporting obligations, costs) has been prepared: Tailings Facility Management Plan - Plan F and Waste Management Plan (Plan B), which contains Sections 5.9.X.7 through 5.9.X.11 dedicated to these issues.
024	The BAT reference in chapter 6 is not clear and the attached table is unintelligible as well.	RMGC apologizes for the printing error which made the reference numbers smaller than ideal dimensions. In any large document as the RMP EIA report it is difficult to achieve the right balance between readability and size of the document. Sometimes it is assumed that the reader has read previous documents related to the same subject and therefore terms has been defined elsewhere. Table 6-6 is the case in point where the references themselves are correct as they referred to well established sources of information and therefore relatively easy for a mining person to find them. These references are key documents to establish BAT but the way that they were presented in Chapter 6 was deficient.
025	The first volume discussing possible impacts on environmental elements (4.1 Water, Volume 11) also starts with repeated items (meteorological, climatic conditions, condition of surface and ground waters, etc.) which have been discussed in detail in previous sections, or similar results are presented in another form, or other data is also presented.	Chapter 4.1 is the primary source of water-related information in the EIA. Because water is relevant to other areas of the EIA such as waste, process description and closure it is also discussed elsewhere in its respective context. This is partly due to the prescriptive nature of the EIA reporting format under the Romanian legislation, and also to enable each chapter to be read or reviewed as a standalone document.
026	In the chapter discussing accidents, overflows and a dam burst is considered negligible (extremely unlikely), but the discharge of water with cyanide content and a low pH value into domestic water is not ruled out in the event of extreme weather conditions possibly to	The principles of Corna dam and TMF design were the storm ocurrences leading to a Probable Maximum Flod (PMF). The TMF system is designed to ensure the storage of two successive PMF events which have the probability of occurence of 1 in 10^8 years.. This precaution exceeds the stipulations provided by the national and international regulations in use and ensures the safe water storage capacity in extreme weather conditions.

	occur every 100 years.	
027	The model mentioned in chapter 7 cannot be identified; only the determinations were recorded in a table. In this form it cannot be verified.	The way in which this question is asked prevents us from identifying the respective model but we suspect it is the estimation model mentioned in subchapter 6.4.3.2. Propagation of the flood wave and cyanide transportation downstream (containing the summarized results in table 7.27). The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Aries-Mures river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mures joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mures River Modelling Program and the full modelling report is presented in **Annex 5.1.**

028	The chapter on waters does not mention or take into regard the Water Framework Directive (WFD), the objectives of which must be implemented by Romania, as well. Only positive impacts are assumed with regard to the implementation of the investment. Similarly, in the course of devising the monitoring systems, the WFD aspects are disregarded, biological parameters are not produced and the frequency of measurements is unsatisfactory, including the range of analyzed parameters.	Unlike in Hungary, which is an EU Member State, the Water Framework Directive (WFD) does not formally become law in Romania until it joins the EU, expected in 2007. Nevertheless, Romania is a party to the Danube River Protection Convention 1994 (DRPC), incorporating EU Member States (such as Austria, and more recently Hungary), Accession Countries such as Romania, and other countries such as Serbia. The DRPC tasked the International Commission for the Protection of the Danube River (ICPDR) with preparing a basin characterisation report for the multinational Danube Basin by 2004 to meet the requirements of Article 5 of the WFD. This report (The Danube River Basin District, referred to as the WFD Roof Report 2004) was completed in 2004 and published in March 2005, and has been supplemented in the case of Romania by the River Basin Management Plans published by Apele Romane (11 basin reports synthesised by a National Report). The WFD timetable requires monitoring networks to be established by 2006, together with the initiation of public consultation. The intent of the EIA was to present information as required by the Romanian legislation and data to indicate the extent of the current impacts without overwhelming the reader. Therefore, the data presentation focused on key regulated constituents. Presentation of a much larger number of analyses would have made the review of the baseline conditions much more onerous without adding significant value. In addition, elements and compounds that are not known to be associated with the current activities in the area were not extensively investigated. This approach is detailed in Section 3.4 of the Water Baseline Report (Baseline Reports Volume 1, State of the Aquatic Environment). Table 3-8 of that report schedules the range of analyses that were determined, and includes many of the elements cited in the question that were not included in the 'selected parameters' as defined in Section 3.4.4. Nevertheless, the complete datasets used for the EIA study and these will be made available to the public as an annex of the "*Form for the submittal of the answers to the isuues raised by the public resulting from the public consultation on the Project's Environmental Impact Assesment study report*" . The data and their interpretation are also described in Sections 2.2.3 (surface water) and 2.3.3 (groundwater) in EIA Chapter 4.1 (Volume 11). It must be appreciated that a distinction needs to be made between the baseline data presented for an EIA, where the objective is to identify and define the mitigations required in respect of significant impacts that may be generated by the project; and the baseline data that will be required in the future for operation and compliance purposes (assuming the project is permitted) where, for example, the requirements of IPPC (Integrated Pollution Prevention and Control) permits will include a wider-ranging parameter list defining the baseline. Because the IPPC permit holder will have to account for divergences from the baseline during the duration of the permit, in those circumstances it is clearly in the holder's interest to analyse for a wide range of elements, including especially EU List I and List II substances (and in due course other substances including 'EC level substances of priority concern', to ensure that they are not held liable for contamination that they were not responsible for. Furthermore, it must be appreciated that it is not for individual industries or projects to comply with the WFD directly. The WFD is a framework providing for competent authorities (in Romania the Ministry of Water and Environmental Protection together with Apele Romane) to establish river basin management programs in order to

		achieve 'good statuses for inland and coastal water quality by 2015. It is up to these authorities to introduce or modify discharge and water resource regulations, which individual entities will have to comply with. Another aspect of complying with the WFD is that the competent authorities must take steps to mitigate the impacts of old and abandoned mine and tailings discharges, of which there are many in Romania. With respect to the 'positive impact' from the investment proposal, there are two aspects to this. Firstly, significant negative impacts have been mitigated as part of the design process in which there has been extensive consultation between RMGC and the EIA team. This has resulted, for example, in the provision of best practice cyanide detoxification and management to meet the requirements of the EU Mine Waste Directive, and a wastewater treatment plant to intercept and treat ARD so that treated effluent discharges comply with NTPA 001/2005 (the current discharge standards) - see Chapter 2 of the EIA. Secondly, the poor quality acid and heavy metal-rich waters that currently discharge without management or control from the historic mine workings and associated wastes will be intercepted and incorporated into the project wastewater treatment scheme. This will result in significant improvement of water quality in the Rosia, Abrud and Aries rivers and should be regarded as a very positive contribution towards Romania's efforts to meet the water quality improvement objectives of the WFD by 2015. The future monitoring program will evolve in scope as required to address all regulatory requirements and will be subject to continual review under the Environmental Management Plan (EMP) as new legislation such as the Water Framework Directive is rolled out.
029	The long term waste management plan for acid rock drainage (ARD) is not adequately substantiated. Cost-profit analyses have been omitted.	The waste management strategy with special attention to the ARD generation potential of the wastes has been described in detail in Section 4.2 ("Waste Rock Segregation") of the Mine Closure and Rehabilitation Plan (Plan J), in the Waste Management Plan (Plan B) and in Chapter 3 ("Waste") of the EIA Report. The composition of the waste rock and the percentage of non-acid-generating (NAG) and potentially acid-generating (PAG) fractions allows the conclusion that the waste dumps and the backfilled open pits will not generate acid seepage, because a strict encapsulation strategy will be implemented. It ensures that PAG material is either stack-dumped (i.e., enclosed by a sufficient amount of NAG material which, first of all, minimizes the ingress of oxygen into the PAG fraction and therefore acid generation is suppressed) or, if end-dumping of PAG material is technologically required, the PAG material will be encapsulated by NAG material during closure. Where encapsulation of PAG by NAG material is not technically possible, the PAG material will be covered applying the SRC cover design for the TMF to the PAG waste rock fractions, too. The separation of PAG and NAG fractions follows a clearly defined testing and QA/QC procedure described in the Waste Management Plan and in a separate Technical Memorandum (referenced under Ref. LIII in the Mine Closure and Rehabilitation Plan). The same strategy is applied to backfilling the open pits. Test plots will be erected to confirm the performance of different cover systems under the real climatic conditions at Rosia Montana, and make predictions on the long-term stability of seepage quality and quantity. Section 5.9.2.9. of the Waste Management Plan describes the preventive measures to mitigate the impact caused

		by the waste rock material on the environment. It refers mainly to the waste dumps but also applies to the backfilled open pits. With respect to profitability calculations (it is assumed here that the questioner means what is commonly referred to as "cost benefit calculations"), the following general conclusions have been drawn: Backfilling of wastes into open pits makes only economical sense if transfer mining can be applied, i.e., filling waste rock from one pit directly into another, mined-out, a pit without interim storage. If the material is stored in waste dumps first and must be handled twice in order to backfill an open pit, the typical cost is 0.8 € per ton (or 2 € per m³). Given the volumes of the waste dumps (Carnic dump: 109 million tons, Cetate dump: 21 million tons, Total: 130 million tons) this would amount to around 100 million €. On the other hand, using the waste segregation strategy and applying an appropriate cover concept on PAG areas, also ensures an environmentally sound solution (no ARD will be produced), at much lower cost. Even in the extremely conservative case that both major waste rock heaps (Cetate: 37 ha, Carnic 139 ha, Total: 176 ha) would have to be covered by a (thicker) PAG cover at unit cost of 12 €/m², the total cover cost amounts to around 2 million €. In reality, due to the waste segregation and encapsulation measures described above, only a minor fraction (if any) of the waste dumps will have to be covered with a PAG cover, while most or all of the waste dump area will be covered by a thinner NAG cover. Therefore, economically relocation of wastes which have to be technologically stored on waste dumps, it is economically disadvantageous to handle the waste twice, and does not add an environmental benefit which would justify the extra cost. On the other hand, there will be ARD which must be treated before discharge into the environment. It results predominantly from the underground mine workings which contain, even after most of the sulphides parts of the ore body will have been mined out, certain amounts of ARD generating areas. Without treatment, the ARD would be discharged into the Rosia Valley (as is the case today and would continue to be so without environmental rehabilitation measures on the Minvest legacy). The Water Management Plan and, again, the Mine Closure and Rehabilitation Plan contain considerably detailed information on how the ARD treatment technology will look like, and why it was chosen from a variety of available technologies, and why it is Best Available Technology (BAT).
030	The possible versions are examined in volume 16 of the impact study documentation. We do not agree with the assertion that the cancellation of the project would only imply adverse consequences, that is, the condition of the environment would further deteriorate due to the mining activity of the past, and the loss of new jobs would contribute to the	Chapter 5 of the EIA Study Report provides an assessment of the “null or no action” alternative and the appendix to this chapter sets out a detailed characterization of the RMP site as it is today, together with costs for remediation (with no RMP). Chapter 5 confirms that the “does nothing” option for the site has significant negative implications for the environment and the community. The appendix shows that acting only to remediate the site (with no regeneration of industry, re-training or re-building of community infrastructure and services) would cost in excess of Euros 20M. It would therefore appear that remediation of the site (without the project) would severely strain the financial resources available to the Romanian Government and what could be done in the best circumstances would fall significantly short of the benefits forecast to accrue from the construction and operation of the RMP. Moreover, it is clear that the RMP would in effect release Government administered money that would otherwise have to be spent on remediation work at Rosia Montana for use in other regions that are not able to take the

	growing underdevelopment and poverty of the region. To our knowledge and according to information provided by our Romanian partners, the program serving the closing of the Minvest tailings management facilities in Deva is underway, comprising part of the program serving the closing of 16 tailings management facilities, as defined in Annex 7 of the Romanian accession treaty. Approximately 80 million EUR is available for this purpose, so the environmental problems caused by the regions environmentally damaging mining activity in the past may be solved. In addition, the owner of Minvest, which is the Romanian state, is obliged to rehabilitate the environment of the region following the shutdown of mining in the course of this year. We understand that the Romanian Ministry of Environmental Protection and Water Management has allocated funds for the first phase of the closing.	benefit of the private inward investment via the RMP. Currently RosiaMin has prepared a closure plan that needs to be endorsed through a Governmental Decision in order to assign the necessary funds to prepare the design of a Mine Closure and Rehabilitation Plan. After this design is approved and endorsed, the necessary funds will be budgeted for the development of specific closure and rehabilitation works. Several other hundred perimeters have similar situations. For instance 80% of a loan of US$125 mil contracted by the Romanian Government from the World Bank has been assigned to rehabilitate 2 mining perimeters. Considering the fact that funds are insufficient, we cannot see how over night Rosia Montana may become a priority and the necessary funds will be identified / assigned for the closure and rehabilitation of this site. Taking into account that the largest gold deposit from Europe exists here, the optimum solution to reinvigorate regional economy is its development as included in the strategy prepared for the mining sector for 2004-2010 period – *privatization of deposits that may be economically developed and closure of those under the economic limit*.
031	In relation to other development alternatives in the area (e.g. tourism, agriculture, light industry), the view is unacceptable that other types of development projects would produce environmental risks similar to those associated with the planned mining investment.	Chapter 5 of the EIA Study Report assesses the impact of alternative industries in comparison to the RMP and concludes that the assessment of risk for any industrial development bringing a similar scale of benefits to that offered by the RMP would have to be at a similar level to that undertaken for the mining project. It is noted that the RMP would not preclude the establishment of other industries and indeed removes obstacles for this, such as poor local infrastructure and environmental degradation.
032	The document fails to objectively	It is considered that cost-profit analysis of other forms of development beyond that set out in Chapter 5 of the EIA

	examine benefits originating from other forms of development; there is no mention of the cost-profit analysis of possible versions. Other development projects should be compared to the costs, benefits and environmental risks related to the planned mining investment. For example, concepts elaborated for the development of tourism, regional development and agricultural funding possibilities preceding and following EU accession should have been taken into account. The study of such alternative economic development possibilities was also supported at the joint meeting of the Hungarian and Romanian governments.	Study Report would exceed the reasonable scope of an EIA for this mining project. Chapter 5 provides a comparative assessment of the RMP against potential alternative development types, but it is not feasible to consider in any greater depth the viability of and cost/profits of other specific developments. The latter would entail assessment of project design, impacts, and planning considerations at approaching the level of detail achieved for the RMP. This is not practicable or justified in terms of assessing the impact of a project. The EIA study team considers that the scope of the assessment of alternative options for the RMP is in conformance with EU and Romanian guidelines for EIA (in the European Commission document, Guidance on EIA – EIS Review, June 2001, Section 2.5 of the Review Checklist provides the main criterion for evaluating the adequacy of the treatment of project alternatives as follows; "Are the main environmental effects of the alternatives compared with those of the proposed Project?").
033	The study also failed to examine other development opportunities for the population in the area following the termination of mining activity (in roughly 17 years), e.g. the limitation of agricultural and tourism development due to mining, the future availability of other jobs, etc. On the basis of the foregoing, it is false and unacceptable to claim that only the implementation of the investment could contribute to improving the environment of the region and economic development.	To the contrary, the EIA study examines other industries that could be developed and identifies constraints and obstacles that currently prevent such alternate development. This allows the EIA study to conclude that the RMP not only does not preclude other industries from being developed, but will also make that easier and more likely to happen. In addition, the CSDP makes specific provision for development of economic activity other than mining, which is aimed to take place during the term of the RMP and also to succeed mining when that ceases on closure of the RMP. To that effect, the RMP closure plan is also designed to allow a productive end-use of the site and create an asset rather than a liability. Chapter 5 of the Report on the Environmental impact assessment study (EIA) (*Assessment of Alternatives*) presents a thorough assessment of the "no-project" alternative – an option that would generate no investment, allowing the existing pollution problems and socio-economic decline to continue. The immediate impact of not advancing the project is covered, and potential alternative industries are examined – including agriculture, grazing, meat processing, tourism, forestry and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes. The conclusions are drawn that "a diverse multi-sector economic base is important for the sustained economic growth of the region" and the Roşia Montană Project (RMP) is capable of providing the required economic stimuli and would serve to achieve the economic goal of sustainable prosperity. Other industries do not have this capability but their development in parallel is not precluded. To the contrary, the report states, "[the RMP] solves several key problems that discourage inward

		investment." RMGC's view of the social and economic benefits of the RMP is described in the Community Sustainable Development Plan and EIA Chapter 4.8 – the Social and Economic Environment. RMGC will collaborate on community development issues with interested parties from the Community. RMGC's commitment to collaboration will extend to local, regional and national authorities. This approach allows the Community to own, direct and control all relevant development issues in a multi-stakeholder and integrated manner. In the spirit of that commitment, to date, RMGC has conducted extensive consultations, including 1262 individual meetings and interviews, and the distribution of questionnaires for which over 500 responses have been received, 18 focal group meetings, and 65 public debates, in addition to holding discussions with government authorities, non-governmental organizations and potentially affected stakeholders. Feedback has been used in the preparation of the Management Plans of the EIA as well as the drafting of partnerships and development programs. A comprehensive monitoring programme is currently being developed by RMGC to evaluate our socio-economic mitigation and enhancement measures. This monitoring programme will include the input and considerations of impacted and potentially impacted stakeholders. To institutionalize this input, RMGC – in association with a number of local stakeholder groups – is in the process of setting up local and regional partnerships to aid RMGC and the community in monitoring the progress of the RMP. RMGC's monitoring programme will be conducted in a transparent manner, allowing parties to evaluate progress of the effectiveness and to suggest implementing improvements. This process will continue throughout the life of the project with the aim of maximizing benefits and minimizing negative impacts. A preliminary framework that will assist in guiding the development of the monitoring plan has been set up (see Volume 14, Section 4.8, Social and Economical Environment, Table 7-1, of the Roşia Montană project EIA). Partnerships include initiatives concerning education and youth development and training, such as: • Roşia Montană NGO Partnership; • Roşia Montană Youth Partnership; • Apuseni Youth Resource Center; • Roşia Montană Educational Partnership. Other partnerships concern monitoring and management of environmental aspects, including The Roşia Montană Research Center for Environment and Health. Bio-physical aspects will be monitored and co-managed with the Roşia Montană Biodiversity Partnership and the Roşia Montană Forestry Partnership.

		To further promote and develop the economic opportunities presented by the RMP, RMGC is also cooperating with local Stakeholders regarding setting up a business center. It is expected that training programs offered by RMGC and its partners, as well as employment experience gained during the RMP, will result in a highly trained and skilled workforce across a range of disciplines. This should place people in a competitive position for work with other mining companies. Such skills are also transferable to the non-mining sector. Beyond direct skill-building, the presence of the RMP as a major investment will improve the area's economic climate, encouraging and promoting the development of non-mining activities. It is expected that the improved investment and economic climate will lead to business opportunities that can develop concurrent with the RMP, even as they extend well beyond economic activities related directly to mining operations. This diversification of economic development is a critical benefit of the investments generated to realize the RMP. The Zonal Urbanism Plan (PUZ) detailing the land surface required by the RMP affects only about 25% of Roşia Montană commune, leaving open many opportunities to establish business ventures in the community. Even now, some businesses have already been established on the remaining 75% of the Commune; once the PUZ is finalized, business start-up will be further encouraged.[1] For more information, please see Roşia Montană Sustainable Development Programs and Partnerships annex 4. References: [1] Information on existing industries, such as agriculture and tourism, is provided in Volume 14, 4.8 Social and Economical Environment, and in Volume 31, Plan L - Community Sustainable Development Management Plan. This information was assembled primarily so that an assessment could be completed on the potential effects of the proposed project on these industries.
034	Technologies substituting cyanide were not analyzed in detail; generally there is one assertion stating that "other methods are potentially more dangerous or technologically/economically inappropriate". This claim would also need to be evidenced with cost-profit analyses. Other non-pollutant or less pollutant	Alternative technologies for the leaching of gold are laid out in detail in Section 4.3 of Chapter 5 of the EIA Study report. Eight alternatives are compared and ranked using 11 Best Available Technology (BAT) criteria, including cost and environmental performance, toxicity, etc. It is concluded that use of cyanide is BAT and use of other lixiviants is not BAT and as such, there is no justification for investigating these further. This approach is supported by practice worldwide and within the EU. In regards with your comments we would like to underline the following:

	substances, replacing sodium cyanide, should have been tested at a pilot plant to determine the applicability of the technology.	
035	Various versions of waste water management should also be supplemented with cost profit analyses.	The purpose of the EIA is to identify potential impacts and the means of mitigating them in accordance with BAT. Alternative waste water management versions were rejected because they did not meet regulatory discharge (NTPA 001/2005) standards. Cost-benefit analysis would not assist with this procedure. The full cost of the watse water management plan has been incorporated into the operating and closure cost estimates. The project remains robust despite the application of the strict water management plans.
036	With regard to the closing of the mine, more detailed tests are required in connection with the backfilling of the open pits. In this case, too, its necessity should be evidenced with profitability calculations, and there is the need to prove that the backfilling does not pollute the subsurface waters due to the ARD potential and the presence of heavy metals.	Additional tests are certainly required (and will be carried out) during the operations phase. This has been highlighted in Section 4.2 ("Waste Rock Segregation Strategy" of the Mine Rehabilitation and Closure Management Plan (Plan J), in the Waste Management Plan (Plan B) and in Chapter 3 ("Waste") of the EIA Report. The composition of the waste rock and the percentage of non-acid-generating (NAG) and potentially acid-generating (PAG) fractions allows the conclusion that the waste dumps and the backfilled open pits will not generate acid seepage, because a strict encapsulation strategy will be implemented. It ensures that PAG material is either stack-dumped (i.e., enclosed by a sufficient amount of NAG material which, first of all, minimizes the ingress of oxygen into the PAG fraction and therefore acid generation is suppressed) or, if end-dumping of PAG material is technologically required, the PAG material will be encapsulated by NAG material during closure. Where encapsulation of PAG by NAG material is not technically possible, the PAG material will be covered applying the SRC cover design for the TMF to the PAG waste rock fractions, too. The separation of PAG and NAG fractions follows a clearly defined testing and QA/QC procedure described in the Waste Management Plan and in a separate Technical Memorandum (referenced under Ref. LIII in the Mine Closure and Rehabilitation Plan). The Waste Management Plan and the Mine Closure Plan refer to total sulphur testing as a very first approximation to the acid generation potential (because sulphide content is closely correlated to the total sulphur content), but also refers to additional analytical methods which will be required. The Acid-Base Accounting (ABA) method is recommended for ARD characteristic testing. This is the method that has been used for the Project ARD characterisation, and is well established and recognised worldwide. The method involves determining sulphur content with a LECO furnace and Acid Neutralisation Potential (ANP) through a digestion and titration. The same strategy is applied to backfilling the open pits. Test plots will be erected to confirm the performance of different cover systems under the real climatic conditions at Rosia Montana, and make predictions on the long-term stability of seepage quality and quantity. Section 5.9.2.9. of the Waste Management Plan describes the preventive measures to mitigate the impact caused by the waste rock material on the environment. It refers mainly to the waste dumps but also applies to the backfilled open pits. With respect to profitability calculations (it is assumed here that the questioner means what is commonly referred to as "cost benefit calculations"), the following general conclusions have been drawn: Backfilling of wastes into open pits makes only economical sense if transfer mining

		can be applied, i.e., filling waste rock from one pit directly into another, mined-out, pit without interim storage. If the material is stored in waste dumps first and must be handled twice in order to backfill an open pit, the typical cost is 0.8 € per ton (or 2 € per m³). Given the volumes of the waste dumps (Carnic dump: 109 million tons, Cetate dump: 21 million tons, Total: 130 million tons) this would amount to around 100 million €. On the other hand, using the waste segregation strategy and applying an appropriate cover concept on PAG areas, also ensures an environmentally sound solution (no ARD will be produced), at much lower cost. Even in the extremely conservative case that both major waste rock heaps (Cetate: 37 ha, Carnic 139 ha, Total: 176 ha) would have to be covered by a (thicker) PAG cover at unit cost of 12 €/m², the total cover cost amounts to around 2 million €. In reality, due to the waste segregation and encapsulation measures described above, only a minor fraction (if any) of the waste dumps will have to be covered with a PAG cover, while most or all of the waste dump area will be covered by a thinner NAG cover. Therefore, as for the economical relocation of wastes which have to be technologically stored on wase dumps, it is economically disadvantageous to handle the waste twice, and does not add an environmental benefit which would justify the extra cost.
037	The description of the monitoring system monitoring the condition of water is not full in its scope The measurement methods of important parameters (e.g. weak acid dissociable (WAD) cyanide) are not indicated. The creation of the sampling network is not representative and there are few monitoring stations. Moreover there is no information available on the surface and subsurface sampling locations, e.g. well data: depth filtering, etc. The material does not discuss issues related to quality assurance, data collection, validation and the disclosure of data.	The intent of the EIA was to present information as required by the Romanian legislation and data to indicate the extent of the current impacts without overwhelming the reader. Therefore, the data presentation focused on key regulated constituents. Sulphate and bicarbonate were included because the Romanian team that prepared the baseline summary felt that these were good indicators of acid rock drainage (ARD) impacts. Presentation of a much larger number of analytes would have made the review of the baseline conditions much more onerous without adding significant value. If the drainages were unimpacted, then the baseline levels would have been more critical as any releases could elevate the concentrations creating degradation. In addition, elements and compounds that are not known to be associated with the current activities in the area were not extensively investigated. For example, cyanide degradation products were not analysed for because there is no known or current use of cyanide in the project area from mineral extraction or other industrial uses. This approach is detailed in section 3.4 of the Water Baseline Report (Baseline Reports Volume 1, State of the Aquatic Environment). Table 3-8 of that report schedules the range of analytes that were determined, and includes many of the elements that were not included in the 'selected parameters' as defined in Section 3.4.4. Nevertheless, we attach the complete datasets used for the EIA study to the Q&A annex in digital format on a CD (not on paper so as to save paper use – but would be sent on paper to any interested part if requested by the Competent Environmental Authority). The data and their interpretation are also described in sections 2.2.3 (surface water) and 2.3.3 (groundwater) in EIA chapter 4.1 (volume 11). As noted in the Volume 1, Water Baseline Report (State of the Aquatic Environment, Volume 1), 353 locations (springs, hand-dug wells, bore hole wells, monitoring wells, ARD sources, stream water, and lakes) were surveyed and sampled for field parameters during an initial survey. From these 72 suitable and representative locations were selected and are used for long-term monitoring. Of these locations, about half (35) are ground water monitoring locations representing both groundwater in the project area (22 locations) and adjacent "background" areas. Data were presented in the EIA for seven sampling events spanning seasonal conditions (four stations were only sampled five or six times during the period presented). Sample data were presented for: May and October

		2001, April and November 2002, May, August and November 2003. Sampling has continued and the newer data will be presented in an updated baseline report which will be publicly available. Summary data for 14 parameters were presented in the baseline report for each of the 72 stations. The parameters presented included: pH, total and dissolved arsenic, total and dissolved cadmium, total and dissolved nickel, total and dissolved lead, total mercury, total chromium, total selenium, sulphate and bicarbonate. These parameters were used to illustrate the extent of current impact (or lack of impacts) from the mining in the region. Other parameters routinely analysed includes: flow (where relevant), temperature, suspended matter, conductivity, Eh, dissolved oxygen, biological biochemical oxygen demand (BOD), chemical oxygen demand (COD), turbidity, alkalinity, calcium, magnesium, sodium, potassium, fluoride, chloride, carbonate, nitrate, phosphorus, silica, total and dissolved copper, total and dissolved iron, total and dissolved zinc, antimony, barium, total chromium, hex chromium, manganese, cobalt, mercury, molybdenum, selenium, phenol, total cyanide, and total dissolved solids (TDS). While not provided in the EIA these data are available to provide a basis for regulatory compliance in the future. In addition, data for other parameters and other stations were collected as part of other baseline sampling programmers. It must be appreciated that a distinction needs to be made between the baseline data presented for an EIA, where the objective is to identify and define the mitigations required in respect of significant impacts that may be generated by the project; and the baseline data that will be required in the future for operation and compliance purposes (assuming the project is permitted) where for example the requirements of IPPC (Integrated Pollution Prevention and Control) permits will include a wider-ranging parameter list defining the baseline. Because the IPPC permit holder will have to account for divergences from the baseline during the duration of the permit, in those circumstances it is clearly in the holder's interest to analyse for a wide range of elements, including especially EU List I and List II substances, to ensure that they are not held liable for contamination that they were not responsible for. The future monitoring programme will evolve in scope as required to address all regulatory requirements and will be subject to continual review under the Environmental Management Plan (EMP) as new legislation such as the Water Framework Directive is rolled out. As noted in the Water Baseline Report (State of the Aquatic Environment, Volume 1), 353 locations (springs, hand-dug wells, bore hole wells, monitoring wells, ARD sources, stream water, domestic water supply sources and lakes) were surveyed and sampled for field parameters during an initial survey. From these 72 suitable and representative locations were selected for long-term monitoring.The 72 locations adequately characterise the baseline water quality both upstream and downstream of the project. The complete list of parameters analyzed includes: flow (where relevant), temperature, pH, suspended matter, conductivity, Eh, dissolved oxygen, biochemical oxygen demand (BOD), chemical oxygen demand (COD), turbidity, alkalinity, calcium, magnesium, sodium, potassium, fluoride, chloride, sulphate, bicarbonate, carbonate, nitrate, phosphorus, silica, total and dissolved (T&D) arsenic, T&D cadmium, T&D copper, T&D iron, T&D nickel, T&D lead, T&D zinc, antimony, barium, total chromium, hexavalent chromium, manganese, cobalt, mercury, molybdenum, selenium, phenol, total cyanide, and total dissolved solids (TDS).

		In addition, the fluvio Sediment Contaminants Baseline Report study (State of the Aquatic Environment, volume 1 that investigated the extent of downstream impacts to river sediments resulted in 421 water and sediment samples collected between July 2002 and March 2004 at up to 153 sites. Fifteen of the sites were common to the RMGC baseline sites discussed above. In addition to the parameters included in the RMGC baseline sampling, the fluvio study included: lithium, rubidium, caesium, beryllium, strontium, barium, boron, scandium, titanium, vanadium, yttrium, zirconium, niobium, aluminum, gallium, indium, tin, thallium, bismuth, and 13 rare earth elements. The larger analyte suite was key for fluvio's fingerprinting study. In addition, the Biological and Bacteriological Baseline Report study (state of the aquatic environment, volume 1 evaluated three locations in the Rosia Montana valley for a large suite of parameters including many of the same parameters in the RMGC baseline water quality sampling programme, but also including ammonia, nitrite, phenolic compounds, detergents, sulphides, hardness, and biological parameters including coliforms.
038	The chapter on monitoring is pasted together; the WFD requirements are omitted, references are incorrect, data is outdated in some places and is not regarded as characteristic of current conditions.	Chapter 6 is one of several documents that address monitoring in the RMP. It is sated in the first page of Chapter 6 that RMGC will develop further the monitoring programme of the RMP. This is not unusual with mining projects at this stage of development. In addition to this, Chapter 6 refers to monitoring requirements/strategies/commitments that can be found in the management plans that are part of the Environmental and Social Management System (ESMS). Chapter 6 represents a summary of the monitoring plans of RMGC while the details of the proposed monitoring can be found in the management plans associated with the environmental issues. So for example, the Tailings Management Facility (TMF) Monitoring Plan contains details of all the monitoring related to the TMF. Nevertheless, we attach the complete datasets used for the EIA study to the Q&A annex in digital format on a CD (not on paper so as to save paper use – but would be sent on paper to any interested part if requested by the Competent Environmental Authority).
039	The EIS lacks the necessity of devising a monitoring system which provides comprehensive and continuous data, immediately signaling to a central station in the event of a possible emergency or exceeded threshold values.	The most important characteristic of an effective system is that it has to be fit for purpose. In the case of a monitoring system it means to monitor elements that are critical on a continuous basis while what is less critical on a more suitable basis (frequency, resolution, response level, etc.). If everything were to be monitored continuously this would increase the likelihood that when a real critical emergency occurs it will be reacted to more slowly than it would otherwise. In the case of the RMP monitoring system, the monitoring/inspection requirements have been rated in terms of how critical they are and the regime imposed accordingly. As an example the monitoring of HCN is continuous and alarmed, alarm systems are tested weekly and other less relevant parameters are monitored monthly or annually. In addition the RMP has an Environmental and Social Monitoring System (ESMS) which includes concepts of continuous improvement and therefore RMGC will change requirements as a result of experience inside the project or as a result of international best practice.
040	The Emergency Preparedness and	This is a correct comment. The stakeholder if referred separately to the Emergency Preparedness and Spill

	Spill Contingency Plan must contain a forecast-alarm system to notify the spread of pollutants and their route within surface waters.	Contingency Plan (PPCPA), to the Internal Emergency Plan (PUI) and to the External Emergency Plan (PUE). It is important to be understood that there are some strict deadlines when these are meant to be completed and submitted to the competent authorities (AC). Thus, the PPCPA for the approval stage was submitted at the same time as the SEIM report. The PUI is to be supposed to be submitted before the implementation of the Investment, and afterwards the PUE will be elaborated by the AC experts. The above mentioned forecasting and alarm system is part of these plans.
041	Additional tests are necessary in relation to possibly accumulating pollutant/toxic substances in deposits, and the range of ecological tests, complying with the requirements of the Water Framework Directive, should be expanded.	It must be appreciated that a distinction needs to be made between the baseline data presented for an EIA, where the objective is to identify and define the mitigations required in respect of significant impacts that may be generated by the project; and the baseline data that will be required in the future for operation and compliance purposes (assuming the project is permitted) where, for example, the requirements of IPPC (Integrated Pollution Prevention and Control) permits will include a wider-ranging parameter list defining the baseline. Because the IPPC permit holder will have to account for divergences from the baseline during the duration of the permit, in those circumstances it is clearly in the holder's interest to analyse for a wide range of elements, including especially EU List I and List II substances, to ensure that they are not held liable for contamination that they were not responsible for. The future monitoring programme will evolve in scope as required to address all regulatory requirements and will be subject to continual review under the Environmental Management Plan (EMP) as new legislation such as the Water Framework Directive is rolled out.
042	The impact study material lacks the analysis of the environmental impacts of similar Romanian investments (TRANSGOLD in Baia Mare, Baia Borsa), for these mines have on several occasions caused extraordinary pollution which also posed a risk to Hungarian surface waters.	The environmental impacts of accidents occurred at other investments from Romania (including those you have already mentioned) have been the subject for certain specific investigations and studies. We believe that they shouldn't be the subject to a new impact analysis within this study. What we have considered as important and relevant is that the RMGC project should take into account the conclusions of the analyses that were carried out taking into account these accidents. A brief presentation comparing the Transgold Baia Mare situation (the moment of the accident in 2000) and the Roşia Montană Project, a presentation that we believe is relevant enough to emphasize the major differences between the two situations: (1) Report "Spill of Liquid and Suspended Waste at the Aurul S.A. Retreatment Plant in Baia Mare", United Nations Environment Programme (UNEP)/ Office for the Co-ordination of Humanitarian Affairs (OCHA), Assessment Mission Romania, Hungary, Federal Republic of Yugoslavia, 23 February – 6 March 2000, Geneva, March 2000 (2). Best Available Techniques for Management of Tailings and Waste-Rock in Mining Activities. EUROPEAN COMMISSION, DIRECTORATE-GENERAL JRC JOINT RESEARCH CENTRE, Institute for Prospective Technological Studies, Technologies for Sustainable Development, European IPPC Bureau, Final Report, July 2004 (http://eippcb.jrc.es/pages/FActivities.htm) (3) The normal operating volume of the TMF pond is 1 million cubic meters. The normal volume multiplies by the

		concentration of total CN indicate the total tonnage of CN store in the TMF. An increase in the volume of the TMF pond will not lead to an increase in the total tonnage of CN store because the increase in volume is likely to be due to climatic events. (4). APELL is “Guidance for the Mining Industry in Raising Awareness and Preparedness for Emergencies at Local Level” developed by the United Nations Environmental Programme (UNEP). See Technical Report 41. The APELL programme is a process which helps people prevent, prepare for and respond appropriately to accidents and emergencies. Maybe another comparison could be relevant with respect to the accident occurred at Aurul TMF in Baia Mare: The reported concentration of cyanides in Someş River at Csenger was 18 mg/l (1 February 2000), in Tisa River at Balsa was 12.4 mg/l (5 February 2000) and the water from Roşia Montană TMF (undiluted by rainfalls and/or blending with the water from receiving rivers, in case of an accident – firstly Arieş River and then Mureş River) will not exceed 10 mg/l of WAD CN. The Terms of Reference for the Roşia Montană EIA and the relevant legal provisions did not require analysis of the Baia Mare project, which in fundamental respects is not at all comparable to the project planned for Roşia Montană – especially as standards, directives and laws have been strengthened since Baia Mare. While many opponents of our project speak of “another Baia Mare,” our project in Roşia Montană bears no comparison. From design to management of the facility itself, financial assurance, public reporting, stakeholder involvement, verification procedures, and compliance – all of which are followed to the highest standards in our project – the two projects are vastly different. In fact, the Roşia Montană project is subject to even stricter standards *because* of the Baia Mare accident. The Romanian Government, in our Terms of Reference, requested that we follow the new European Directive on Waste Management even before it became law in Europe or Romania. The Baia Mare accident has fundamentally changed the rules and regulations in Europe for the production, transportation and use of cyanide. The new stricter standards (toughest in world) make it impossible for any new mining project with a design and operating procedures similar to the Baia Mare mine to ever be permitted in Europe. The Environmental Impact Assessment (EIA) study we submitted last year is the first in Romania to be EU compliant and is designed so that not a single exemption from existing or planned laws is necessary. To illustrate our commitment to high standards, wherever Romanian and EU requirements differ, RMGC has chosen to abide by the stricter of the two. In addition, while existing gold mines will have as long as 10 years to come into compliance with stricter regulatory standards, our Roşia Montană Project will meet these standards from the first day of operation.

		A large part of the changes since the Baia Mare accident is the introduction of the International Cyanide Management Code, to which Gabriel/RMGC is a signatory, and which stipulate strict guidelines for the production, transportation and use of cyanide. The Code also includes requirements related to financial assurance, accident prevention, emergency response, training, public reporting, stakeholder involvement and verification procedures. The International Cyanide Management Code can be referenced at www.cyanidecode.org. As for a specific comparison, the Roşia Montană Project ("RMP") differs from Baia Mare on every key indicator – such as cyanide detoxification in the process plant, design and construction of the Tailings Management Facility (TMF) and embankments, management of the facility itself, financial assurance, public reporting, stakeholder involvement and verification procedures. In short, the Rosia Montana Project is in no way comparable to Baia Mare. [1] The cyanide used in the RMP will be subject to a cyanide destruction process and residual cyanide deposited with the process tailings in the Tailings Management Facility ("TMF") will degrade rapidly to levels well below maximum regulatory levels. Because detoxification will take place before the tailings are deposited to the TMF, they will contain very low concentrations of cyanide (5-7 parts per million or ppm or mg/l) which is well below the regulatory limit of 10ppm recently adopted in the EU Mining Waste Directive 2006/21/EC. This system of use and disposal of cyanide in gold mining is classified as Best Available Techniques, as defined by the EU Directive 96/61/EC (IPPC). This is a key difference with Baia Mare: Baia Mare did not have a cyanide destruction mechanism (detoxification process) in the process plant, as the RMP has. As a result, the concentration of cyanide in the tailings disposed in the TMF at Baia Mare was between 120-400 ppm of cyanide. The near-zero content of the RMP solution would therefore, in the unlikely event of a spillage, mean that the quantity of cyanide in the water would be a small fraction of what was experienced at Baia Mare. The proposed dam at the Roşia Montană Tailings Management Facility (TMF) and the secondary dam at the catchment basin are rigorously designed to exceed Romanian and international guidelines, to allow for significant rainfall events and prevent dam failure due to overtopping and any associated cyanide discharge, surface or groundwater pollution. Baia Mare was not designed to the same high standards and did not have the requisite capacity to withstand the storm event in 2000. In order to ensure sufficient capacity to avoid overtopping, the elevation of each stage of the TMF through the life of the project is determined as the sum of the design volume required to: (1) store process water and tailings for the maximum normal operation volume of tailings and the average decant pond volume; (2) store run-off resulting from two PMP – Possible Maximum Precipitation -- storms and, (3) Provide a tailings beach and additional

		freeboard for wave protection to the tailings volume at each stage during operations; a conservative freeboard criterion is based on the PMF storage plus 1 metre of wave run-up. The TMF has been designed to meet the more stringent PMP event. Furthermore, in order to ensure that the TMF can store a full PMF volume at all times, it is actually designed to safely hold the flood waters from two consecutive PMP events. The Roşia Montană TMF is therefore designed to hold a total flood volume over four times greater than the Romanian government guidelines and 10 times more than the rainfall that was recorded during the Baia Mare dam failure. An emergency spillway for the dam will be constructed in the unlikely event that pumps fail due to malfunction or power interruption at the same time as the second PMP event. The TMF design therefore very significantly exceeds required standards for safety. This has been done to ensure that the risks involved in using Corna valley for tailings storage are well below what is considered safe in every day life. The TMF for RMP will be built along the centerline method, by using borrowed rockfill and waste rock – which is BAT for the industry. The EIA describes how the dam will be built with solid rock materials, designed and engineered by MWH, one of the leading dam designers in the world and reviewed and approved by certified Romanian dam safety experts, (members of ICOLD committee). Prior to operation, the dam must be certified for operations by the National Commission for Dams Safety (CONSIB) and perform an independent audit every two years. RMGC has utilized the world's foremost experts in these areas to ensure the safety of the project's workers and the surrounding communities. Baia Mare was built of coarse tailings materials -- not rockfill -- and therefore was not able to handle the additional weight of the storm event in 2000. RMP will have a free draining structure above the starter dam, and a system of under-drains, granular filter zones and pumps – as per BAT – to collect, control and monitor any seepage. Specifically, the tailings ponds and tailings dam have been designed to the highest standards to prevent pollution of groundwater, and to continuously monitor the groundwater and extract any pollution detected – a system verified by hydro-geologic studies. Specifically, the design features include an engineered clay liner system within the TMF basin to meet a low-permeability specification 10^{-6} cm/s, a cut-off wall within the foundation of the starter dam to control seepage, a low permeability core for the starter dam to control seepage, and a seepage collection dam and pond below the toe of the tailings dam to collect and contain any seepage that does extend beyond the dam centerline. In terms of management, Baia Mare was rated a Category C facility – requiring no special surveillance and monitoring. Roşia Montană Project, however, is Category A, meaning that a full EIA detailing baseline conditions, project impacts and mitigation measures, is required before receipt of permits, as well as future monitoring and reporting requirements. Finally, Baia Mare lacked a Cyanide Management Plan. By comparison, the Rosia Montana Project has a Cyanide Management Plan, in compliance with the International Cyanide Management Code (ICMC) – BAT for today's

		projects. In conclusion, we hope we have provided a detailed account of why our project in Rosia Montana isn't only vastly different from the mine in Baia Mare but that it is also designed to be a model of responsible mining, incorporating Best Available Techniques and implementing the highest environmental standards. Reference: [1] Please see Baia Mare information sheet in the Annex, for a detailed comparison between Rosia Montana and Baia Mare, including results of the UNDP assessment of Baia Mare.
043	In the absence of appropriate water quality models, the environmental impact study does not offer a satisfactory answer regarding the potential environmental impacts on water, thus the evaluation of impacts on the water environment are not acceptable, either.	The EIA study report provides a clear assessment of the impact of the project on water quality. This will be beneficial because the quality of streams draining the site will be improved due to the remediation of existing pollution problems. This has no significant impact on water quality in a transboundary context. Nevertheless, to satisfy concerns expressed by stakeholders, RMGC has commissioned dynamic hydro chemical modelling of the river system downstream of the project to demonstrate the validity of these conclusions. These data will be submitted to MEWM together with the responses to stakeholder submissions and questions. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used

		to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
044	A detailed (certified and evidenced) pollutant spread model test, relating to the total affected water flow system, should be carried out, assuming the occurrence of an event of however small probability which may contribute to the emission of some of the substance contained in the tailings management facility into the surface waters under operating conditions. A detailed analysis of accident	The EIA study includes TMF dam failure scenarios, analyzing the consequences of such an event. Taking into account the special safety measures provided for dam protection, this type of event is very unlikely to occur. Based on the suggestions received during public consultations period, the initiative to establish a detailed dispersion model for the contaminants generated from a potential accident has been taken. This model is currently in development and will be enclosed to the EIA study. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an

	probability should furthermore be performed, closely linked to climatic change scenarios and the evaluation of the above in summarized tables.	important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
045	It is necessary to devise a detailed emergency plan primarily serving the protection of surface waters.	We have to refer separately to the Emergency Preparedness and Spill Contingency Plan (EPSCP), to the Internal Emergency Plan (IEP) and to the External Emergency Plan (EEP). The name “Emergency Situations Plan” can be found in the Romanian legislation by those mentioned above.

It is important to understand that there are some precise deadlines when these plans must be elaborated and handed in to the Competent Authorities (CA). Thus, the EPSCP has also been handed in, together with the EIA, for the permit issuance phase. The IEP must be handed in before the investment's implementation, and, after that, the CA experts will elaborate the EEP.

In the unlikely event that such an accident would occur, the Romanian authorities along with the operator will act in accordance with the emergency plans provided for by the existing legislation:

- Internal Emergency Plan
- Emergency Preparedness and Spill Contingency Plan
- External Emergency Plan

The main emergency response actions are the following [1]:

- The aforementioned plans are to be immediately implemented;
- Local and on-site units are to be immediately alerted and deployed;
- Actions should be coordinated with the external emergency plans applicable to the local communities;
- First aid assistance;
- The people living downstream of the secondary containment dam and the residents of the Abrud town are to be immediately notified of the accident and possibly evacuated;
- The site manager and the local, regional and national authorities are to be promptly notified. In the event of an alert on possible terrorist attacks, the representatives of the relevant regulatory and military institutions are to be notified;
- Implementation of the emergency systems, closure of the process plant and of the tailings delivery pipes, consolidation works carried out to the extent required by the nature of the accident (breach repairs, backfilling, reinforcement works, construction of dikes and diversion channels);
- Accident investigation and implementation of corrective and preventive measures;
- Implementation of other specific emergency actions.

The proposed construction of the Corna Dam, intended to contain the tailings, is based on design criteria that comply with Romanian and international standards. These criteria are meant to ensure maximum safety levels during the construction, operational, closure and post-closure stages. They include flood control criteria, safety factors for slope stability and seismic design criteria etc

Based on the criteria previously mentioned, the dam has been designed to withstand an earthquake measuring 8 on the Richter scale. No such event has ever occurred on the Romanian territory and it is hard to imagine the mechanism that could cause such an event in the future.

The main design elements that ensure the dam’s increased safety include the following:

- the dam has been designed to retain water resulting from 2 consecutive PMFs;
- with each dam rise, a spillway will be constructed to discharge, in a controlled way, the excess water resulting from potential extreme events. This will help to prevent the erosion of the dam's downstream slopes;
- the rockfill starter dam has an impervious core and an embankment slope measuring 2H:1V downstream and 1.75H:1V upstream;
- The main dam –the Corna rockfill dam, of centerline construction and downstream slopes measuring 3H:1V;
- a drainage system at the bottom of the tailings management facility and a filter layer between the rock fill and the tailings, to reduce humidity and consolidate the stored material;
- a monitoring system set up on the dam's crest or on its vicinity, to provide timely information regarding potential instability situations, excessive rise of the groundwater in the dam body, excessive increase of the water volume stored in the decant pond;
- implementation of a strict Quality Assurance program, during the entire construction period.

Under these circumstances, an accident resulting in dam failure is highly unlikely. However, hypothetical scenarios have been imagined, based on the assumption that the technical errors resulting from noncompliance with the construction methodology have led to dam failure. These scenarios represent the worst case scenarios that could be identified, taking into account the technical characteristics of the TMF. The scenarios are presented in detail in Chapter 7, the EIA Report, subchapter 6.4.3, pages 117-121).

Referred to subchapters 6.4.3.2 and 6.4.3.6 we like to mention that a new and much more precise and realistic simulation has been subsequently established based on the INCA Mine model, that considers the dispersion, volatilisation and breakdown of cyanides during the downstream movement of the pollutant flow (Whitehead et al., 2006). The new study has been attached to the Report on Environmental Impact Assessment Study (Annex 5.1).

References:
[1] Chapter 5, *the Security Report*
FWe appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report.

The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating

		conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
046	The impact of cross-border pollution on protected natural values should	The EIA Study report concludes that under all normal and forecast extreme conditions for construction, operation and closure stages of the RMP, the project has no potential for significant impact on protected areas within the

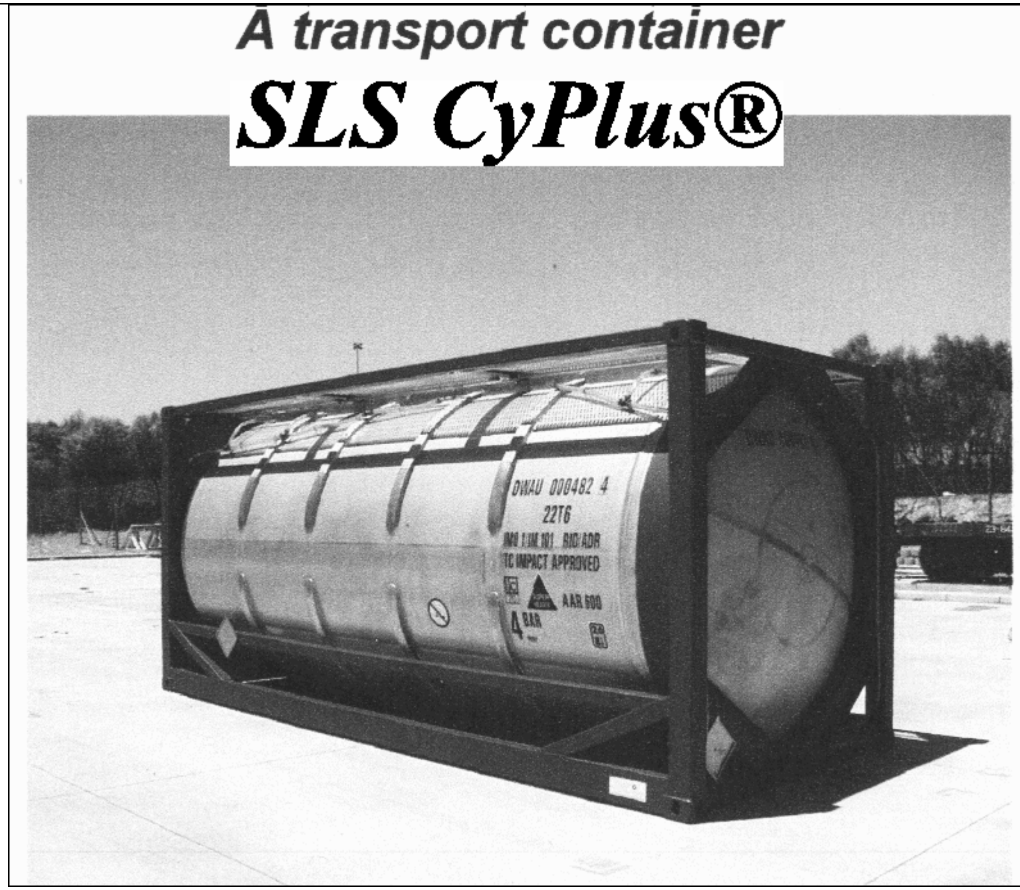
	be analyzed (primarily in the area of the Körös-MarosNational Park).	regional setting, apart from specific monuments to nature on the RMP site that are identified. There can therefore be no potential for impact on protected areas within Hungary. The EIA does examine risk of a major accident that could give rise to contamination of surface waters downstream of the project (a Baia Mare type incident) We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the

		dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
047	The chapter dealing with the occurrence of emergencies caused by natural catastrophes is inadequate and not supported with reliable evidence.	This statement has no supporting elements to enable the identification of the data deemed to be inaccurate. The EIA study makes a thorough analysis of the possibility of occurrence and the possible consequences of specifically dangerous natural phenomena. The risks related to earthquakes, weather conditions, floods, fire, earth slide are taken into consideration. In this regard design criteria used for the Tailings Management Facility's (TMF), construction have been chosen in such a way as to guarantee its stability and operation, even if it is put under extreme pressure or charge as a result of natural phenomena, such as floods or earthquakes. The suggested scenarios, related to the dam failure, take into account possible construction vices, because a dam failure, in normal conditions or conditions generated by the extreme natural phenomena, is hard to argue, considering the used projection criteria. An extreme natural event may trigger a potential accident caused by presumptive construction flaws. These situations can be avoided by strictly implementing the established construction techniques. The national regulations stipulate that the TMF must hold a quantity of rainfall water of 227 mm in 24 hours, its occurrence probability being 1: 10.000 years. For safety reasons, the much stricter criterion of 450 mm for the Probable Maximum Precipitation (PMP), meaning 2.750.000 m^3, has been chosen during the TMF design, for the case of the maximum probable flood during the cold time of the year. The available volume of the TMF has been designed to reach 5.5 million m^3, i.e. the volume of two PMP events; the purpose of such an oversized TMF is to prevent the overcharge phenomenon. This TMF dam design, based on PMP and PMF values (Probable Maximum Flood) makes Roşia Montană the first project in Romania to take these hydro-meteorological parameters into consideration as design criterion. The design of the TMF has also taken into account parameters that entirely cover the seismic risk of the site area: ▪ Operating-basis earthquake (OBE) - that may occur once every 1 to 475 years and corresponds to a maximum acceleration of the bedrock of 0.082 g, and has an 8.0 degrees magnitude. ▪ The maximum earthquake taken into account for the design (MDE) – considered to be the equivalent of the maximum credible earthquake, corresponds to an acceleration of the 0.14 g of the bedrock, and has an 8.0 degrees magnitude. These seismic parameters, taken into consideration for the design of the TMF which will reach or exceed the 1.1 safety factor considered sufficient by the national and European standards for designing such facilities. All this considered the real risks for both 2 PMP and MDE to be exceeded during extraordinary events are extremely low

048	When describing hazards, the indicators expressing magnitudes should be indicated (in hydraulic engineering and in relation to earthquakes, this is revealed by the probability of occurrence and the proportionate magnitude).	The indicators expressing the magnitude are (as we believe) relatively circumstantially, as described in subchapters 2.2, Seismic Risk, 2.3 The risk of Meteorological Events, and also in subchapter 4, Identification of Potential Accident scenarios (4.2.5, Operation Phase - Tailings Management Facility). The hypothetical accidents which may be caused by human errors, consisting in the non-observation of the project provisions related to the dam construction, are presented and analyzed in subchapter 6.4.3, Risk analysis – TMF.
049	When estimating standard load, one must consider possible extreme load (precipitation, earthquakes) - occurring with lower probability - in the course of the roughly 20 years (30 years including termination) construction/operating period and the real risks this can create when combined with specific accident scenarios.	It is not clear which site facility the comment refers to. Regarding the Tailings Management Facility (TMF), in case the comment refers to this facility, the design criteria used for the dam's construction have been chosen in such a way as to guarantee its stability and operation, even if it is put under extreme pressure or charge as a result of natural phenomena, such as floods or earthquakes. The suggested scenarios, related to the dam failure, take into account possible construction vices, because a dam failure, in normal conditions or conditions generated by the extreme natural phenomena, is hard to argue, considering the used projection criteria. An extreme natural event may trigger a potential accident caused by presumptive construction flaws. These situations can be avoided by strictly implementing the established construction techniques. The national regulations stipulate that the TMF must hold a quantity of rainfall water of 227 mm in 24 hours, its occurrence probability being 1: 10.000 years. For safety reasons, the much stricter criterion of 450 mm for the Probable Maximum Precipitation (PMP), meaning 2.750.000 m^3, has been chosen during the TMF design, for the case of the maximum probable flood during the cold time of the year. The available volume of the TMF has been designed to reach 5.5 million m^3, i.e. the volume of two PMP events; the purpose of such an oversized TMF is to prevent the overcharge phenomenon. This TMF dam design, based on PMP and PMF values (Probable Maximum Flood) makes Roşia Montană the first project in Romania to take these hydro-meteorological parameters into consideration as design criterion. The design of the TMF has also taken into account parameters that entirely cover the seismic risk of the site area: ▪ Operating-basis earthquake (OBE) - that may occur once every 1 to 475 years and corresponds to a maximum acceleration of the bedrock of 0.082 g, and has an 8.0 degrees magnitude. ▪ The maximum earthquake taken into account for the design (MDE) – considered to be the equivalent of the maximum credible earthquake, corresponds to an acceleration of the 0.14 g of the bedrock, and has an 8.0 degrees magnitude. These seismic parameters, taken into consideration for the design of the TMF which will reach or exceed the 1.1 safety factor considered sufficient by the national and European standards for designing such facilities. All this considered the real risks for both 2 PMP and MDE to be exceeded during extraordinary events are extremely low.
050	Technological risks related to the management of chemical substances should be assessed differently if the hazards are not the result of natural phenomena but of human error, negligence or defects	In general, in risk assessment practice, the extension of the risk analysis has to be proportional to the involved risk, so detailed risk quantification is not always necessary. A preliminary, qualitative assessment of the natural phenomena associated risks (subchapters 2.2, 2.3, 2.4, 2.5, 2.6, 2.7), of technological risks (subchapter 3) and of the transport associated risks (subchapter 4) has been achieved in Chapter 7 ("Risk") of the EIA. Those accident scenarios have been analyzed in detail in subchapter 6, Potential Major Accidents and, after conducting the qualitative analysis, they have been classified as potentially major, all of them are related to dangerous substances

	in design/construction/material quality.	management. Most of these scenarios are not caused by natural phenomena; no distinctions based on causes have been made, but the maximum consequences these events can generate have been given particular attention.
051	The safety of cyanide transport on public roads/rail is not discussed (poor quality roads - particularly in the winter and spring season).	The transport of cyanide is discussed in Section 4.10 (transportation). This section includes a discussion of methods to reduce the risk of accident, including maximizing use of rail transport and selection of the safest route between the rail depot and the plant site based on a continuous assessment of road conditions and hazards, as well as weather. This means that the selected route may change from time to time, based on this ongoing confirmation of the safest route. In addition, other special measures will be adopted for the transport of sodium cyanide. These are documented in the Cyanide Management Plan, as well as the Emergency Preparedness and Spill Contingency Plan, annexed to the EIA Report. Supply, transport and use of cyanide will be carried out under the terms of the International Cyanide Management Code to which RMGC is a signatory. The cyanide transporting supplier/transporter would be selected on the basis that they are also a signatory to the Code and are able to provide evidence of a satisfactory performance. Such companies will also be required to operate in accordance with the standards of SHE (Safety, Health, Environment) and TQM (Total Quality Management).
052	Measures linked to the development of the transportation/delivery infrastructure lying outside of the plant premises should also be detailed, considering the lack of information related to cyanide transports partly made on public roads. We should expect the transport of 12 thousand tons of sodium cyanide annually partly on public roads. Considering a 20 ton freight per truck, this would correspond to at least two deliveries per working day (600 a year and a total of 8,000 deliveries). The specific logistical concepts are unknown, although the material makes a reference to the "maximum utilization of rail", and no mention is made on the unloading station, the possible public road transport routes, transport related	The EIA Study Report describes the options that are available for the transport of sodium cyanide, in the form of containerized solid briquettes, from the manufacturer to the site. As noted in Chapter 4 of the EIA Study Report, RMGC has committed to using the safest route and they recognize that they must take into account factors that will change through time, such as weather, road conditions, traffic hazards, route availability, etc. It is, therefore, not appropriate to select only one route option. It is also stressed that transport will be carried out under the terms of the International Cyanide Code to which both the cyanide supplier and RMGC will be signatories. This not only requires adherence to measures that assure safe supply, transport and use of this reagent, but also requires independent audit to ensure that safety measures (including the selection of the safest routes on every occasion) are adhered to. It was the occurrence of isolated accidents (such as that near the Kumtor mine) involving cyanide spillage or loss that encouraged the rapid adoption of the Cyanide Code. The logistics of the cyanide transport are analyzed in Chapter 7 (Risk) of the EIA Report (5.1.2. Transport system for sodium cyanide and 5.2 - The selection of the route for the transport of sodium cyanide). RMGC acknowledges that transportation of people and materials is a challenging task given the condition of Romania's current transportation infrastructure. As a result, the EIA report shows project supply route *options*. During operations, our plans are to maximize the use of rail to a depot near the project site whenever possible. When using trucks, our operating procedure will most likely be to group the transport into convoys of 12 trucks once per week to reduce the possible risk of accident. The shipment will occur only after an assessment of current conditions and confirmation of ability to receive shipment at site. RMGC and its suppliers will fully comply with ADR (European Agreement concerning the international carriage of dangerous goods by road) and RID, (the European regulations covering the international carriage of dangerous goods by road or rail). Transportation routes will be selected, in consultation with administration and road traffic authorities as to avoid

	precautionary regulations and emergency and accident prevention plans. It is a cause for concern that an operation of 13-15 years - including cyanide deliveries deemed to be dangerous goods transports - is planned without the construction of a direct rail connection. In a period of such length, with transport performance of such size under the known road conditions, it is almost certain that multiple accidents will occur in which the transport vehicle directly falls into a water flow (see the Kumtor incident in Kirghistan), and no information may be available on the event for hours. The documentation does not contain data on the identification and prevention of the above risks (this deficiency must by all means be remedied from the point of view of the party suffering the impact).	hazards, and constant communication during the transit process will help ensure secure delivery to the intended site. Upon delivery, the briquettes will be dissolved directly into a safe container and remain completely contained within the process and plant site. There will be enough storage capacity at the Roşia Montană site to guarantee continuous operation and also allow flexibility of delivery to avoid unusual hazards such as poor road or weather conditions. The EIA notes that RMGC will undertake a survey to provide new information; this survey will include a robust mitigation strategy and allow more detailed provisions for specific cases. The proposed new survey will provide information on conditions of various routes option and the community will be consulted regarding their concerns. The Transport impact assessment will identify the classes of impact, including increase in heavy traffic volumes, noise and vibration as well as potential for accidents and spill of dangerous substances. RMGC is committed to respecting the Romanian and EU relevant legislation and also to imposing the observation of such obligations also by its suppliers in order to ensure that all requirements for safe transportation of any hazardous materials are met. Also, our company and our suppliers will adhere to the guidelines of the Cyanides Sector Group of the EU (CEFIC) for storage, handling and distribution of alkali cyanides. CEFIC sets the standards and requires compliance with EU Directives regulating the transport of thousands of different hazardous substances shipped daily throughout the EU. RMGC is also a signatory of the International Cyanide Management Code (ICMI), an internationally recognized practice for cyanide management in the gold mining industry; we will require our suppliers to sign and abide by ICMI and the Roşia Montană plant will be ICMI certified. An ongoing, rigorous and independent audit of the cyanide management system will be followed as well. The Kumtor incident was very uncommon and the Code is designed to reduce risk of such accident still further. This incident also involved solid sodium cyanide packaged in 1 ton polyethylene bags, with 20 tons in each truck container; for Rosia Montana, the sodium cyanide will be transported as solid briquettes in specially reinforced tanks (SLS), which minimizes any chance of spillage, even in the case of a road accident. A photograph of this type of tank is presented below.

<table>
<tr><td></td><td></td><td>
</td></tr>
<tr><td>053</td><td>The risk analysis related to flood risks accurately estimates the increase of the risk of floods, however it fails to provide detailed information on the forecasting models used. Thus, the statement that the project design ensures sufficient protection against such events, is unacceptable.</td><td>The chapter on generated flood risk includes a detailed analysis of the variables of flood generation, the multi-annual hydrological regime and provides measures for the prevention, mitigation and combating the effects generated by floods. The currently available forecasting models of the climatic changes and, implicitly, of the possible changes in the hydrological regime, are rather uncertain.

To prepare highly accurate and complete meteorological and hydrological forecasts that will be properly used by those who are responsible with the management of risk situations, represent major methods that are used to prevent and mitigate negative impacts associated with hazardous hydrological and meteorological phenomena.</td></tr>
</table>

		Forecasts made for short periods (nowcastings) have an anticipation period of maximum 12 hours. It focuses on hazardous meteorological phenomena having elevated space and time variability: heavy rainfalls, lightening, monsoon, etc. This is why this type of forecast generates the *warning, weather deterioration or red type message,* depending on the intensity of the hazardous phenomenon, issued by the regional meteorological center. In Romania, all these activities are associated with the Integrated National Weather-Forecast System (SIMIN). This system uses state-of-the-art equipment (for example, Doppler radars installed in Bobohalma and Oradea covering Roşia Montană area), which ensures a higher flow of meteorological data, and thus enables very short term forecasting (3-12 hours), with an accuracy of more than 90%. In this respect, RMGC will initiate a partnership with the National Agency for Meteorology (ANM) in order to be notified in a timely fashion if hazardous hydrological and meteorological phenomena occur. In case of very small hydrographic basins, such as the Roşia and Corna, it is precisely this type of equipment that is required due to the fact that floods occur immediately after the rainfalls. Moreover, pluviometers have been installed in this area to measure rainfalls (Roşia Montană meteorological station, RMGC's own station and the automatic pluviometers from the Abruzel, Sălişte, Roşia, Corna weirs which also belong to RMGC). These devices ensure timely recording and transmission of data and if "critical" rainfall limits are exceeded, the necessary measures may be taken: warning and evacuation actions of the population exposed to the risk, as the case may be. The flows of the main water courses crossing the site (Abruzel, Sălişte, Roşia, Corna) are permanently monitored using RMGC's stations placed at each stream mouth on Abrud river. The information is presented in the EIA, Chapter 7. Risk, Section 2.4.3.2. *The Forecast and Warning System for Hazardous Meteorological and Hydrological Events* Regardless of the weather forcasting the TMF has been designed two consecutives PMP which have a probability of storm ocurrence at 1 to 10^8 years. In order to prevent the negative consequences potentially generated by such modifications, sound structural and non-structural measures, described in the EIA, have been taken into account.
054	In the chapter examining transboundary impacts, in several places, certain events are falsely assessed as local impacts because these have the potential to produce an extensive impact. The impact of cyanide that may be discharged, for example, into surface waters through fissures occurred at the dam is assessed as having a local	We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions.

	impact.	The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
055	In relation to quality risk analysis, it would be practical and necessary to provide quantity analyses of the risk	The risk assessment methodology is based on a quantitative assessment of all the potential accident scenarios that have been anticipated, followed by a detailed assessment of the major accident scenarios, selected based on the provided criteria (the possibility exceeds 10^{-6} and/or which have a risk index greater than 9). We would like to

	of all accident series in case of events which - have a frequency of over 1E-8/year and -the consequences are greater than the moderate level and - the risk index is 8. It would be necessary to describe in more detail and identify the event series selected for the additional quantity analysis. In the current study it is not clear why only few series of possible serious accidents were selected for the quantity risk analysis. It would be necessary to provide a more detailed description of the consequence and reliability analysis. The study only contains general modelling assumptions. It is also unclear how the frequency of possible serious accidents was calculated and determined in quantity (e.g. with the fault tree/event tree method). No consequence-result of a single possible serious accident series was provided (e.g. impact zones of the event series, considering the specific time window of such event series as well).	underline that, according to the guidelines prepared by the Health and Safety Executive (HSE) on "as low as reasonably practicable" (ALARP), an accident that causes the death of 50 or more individuals is considered as being intolerable, if the estimated frequency is higher than 1/5000 per year. An extension of the quantitative assessment to the low risk accidents, (as suggested) is possible, but, in our opinion, unjustified. With respect to a greater detail of the quantitative analysis of the scenarios identified as potential major accidents, is also possible but we have to take into account the fact that all these assessments considered the maximum consequences possible, so any other particularization will lead, in the worst case, to similar consequences.
056	In relation to the stability of the TMF's dam, we object to an "only" 60 m deep dam burst taken into consideration which is successfully contained by the lower dam. Why was no analysis made of a possibly greater accident? In knowledge of the consequences of the accidents	Based on review of historic tailing dam failures, world-wide, the primary mechanism is related to water management. To address this mechanism the Rosia Montana TMF is designed to store two Probable Maximum Flood (PMF) events. Given the robust design feature as well as other redundant features, the potential for any failure is very low. However, RMGC agreed that a dam break scenario should be evaluated. Therefore, RMGC collected members of the EIA team, and Romanian and international experts to discuss what scenarios have some plausibility. During a meeting held on February 22, 2006 a reasonable scenario for a dam failure was developed that was based on the expert opinion of the group. The following assumptions were presented and agreed on. • The current dam design is very robust with many redundancies incorporated in the design. The design

	in Nagybánya and Borsabánya, the claim is totally unsubstantiated that the escaping tailings reach a distance of 1.6 km.	redundancies were based on a review of historical dam failures as reported by ICOLD. Tailings Dam Incidents, U.S. Committee on Large Dams - USCOLD, Denver, Colorado, ISBN 1-884575-03-X, 1994, 82 pages [compilation and analysis of 185 tailings dam incidents]
		• Redundant design features include:
		  • Storage for two PMF volumes;
		  • A spillway will be constructed into each raise to allow a controlled discharge of water without eroding the dam in the very unlikely event that the storage capacity is exceeded;
		  • A water retention dam design for starter dam [(clay core, with rockfill downstream (2H:1V slopes) and upstream (1.75H:1V slopes)];
		  • Downstream constructed rockfill dam with 3H:1V slopes for the first two dam raises above the starter dam;
		  • Centerline constructed rockfill dam with 3H: 1V slopes for subsequent raises. (Standard practice is for 1.5:1 to 1.75:1 slopes. The 3:1 slope increases stability and reduces the potential for failure);
		  • A comprehensive under-drainage system and filter and transition zones between the rockfill and tailings materials;
		  • A comprehensive monitoring system within and around the dam to provide early indication of any potential instability, excessive head build up, and/or excessive reclaim pond volume growth; and
		  • A comprehensive Construction Quality Assurance program will be implemented during the initial dam construction and subsequent dam raises.
		
		Even with these redundant design features a failure scenario was developed that included the following assumptions.
		1 Starter Dam (Elev. 739 meters) Failure Scenario
		• The dam construction falls behind schedule and there is considerable pressure to maintain or increase production.
		• Rockfill production at the quarry cannot meet the dam filling rates.
		• Alternative quarry sources are proposed and developed to supplement the dam construction.
		• The CQA team is stretched to the limit to monitor the quality of the rockfill based on multiple borrow sources being used.
		• During a night shift a single life of poor quality rock (clay soil consistency) is placed and buried across the entire dam cross-section. The zone is buried before it is identified as substandard by the CQA monitoring team at the dam.
		• The weaker layer is in the upper 40 meters of the dam section. This depth was selected because it would be late in the dam construction sequence. In addition, due to the reduced work areas near the crest of the dam, the filling rate would be very fast and could explain why the weak layer could be placed and covered before it was noted by the CQA team.

		Starter Dam Failure Scenario
		• Based on the above it was assumed that a failure of the dam could occur to a depth of 40 meters.
		• The Jeyapalan model was used to estimate the depth and extent of the tailings deposition if the upper 40 meters of the starter dam were to fail. The model does not consider the rockfill above the failure plane that would also displace and in reality reduce the extent of tailings discharge.
		
		Starter Dam Failure Results - Jeyapalan Model
		• The results of the model analysis utilizing the following input parameters:
		  • Estimated average values were determined from the probable minimum and maximum values of the mine tailings yield strength and plastic viscosity reported by Jeyapalan;
		    o Yield strength of 4.08 kPa;
		    o Plastic viscosity of 2.45 kPa*s;
		  • Total unit weight of 13.5 kN/m^3 for the mine tailings;
		  • Bed slope of 0.7%;
		  • Results indicated a total runout distance of approximately 0.6 kilometers.
		  • Assuming, conservatively that this is measured from the toe of the starter dam, the maximum extent of the tailings would be approximately 0.8 kilometers upstream from the confluence with the Abrud river. The majority of the material would be contained by the Secondary Containment Dam.
		Main Dam at Ultimate Height (Elev 840 meters) Failure Scenario
		• During the end of the mine life, focus on dam construction is reduced and the mine is not producing suitable rockfill for dam construction.
		• Due to lack of focus on the dam and the desire to not develop a new borrow pit, external to the mine pits, unacceptable rock fill is placed in the upper 60 meters of the ultimate dam.
		Ultimate Dam Failure Scenario
		• Based on the above it was assumed that a failure of the dam could occur to a depth of 60 meters.
		• The Jeyapalan model was used to estimate the depth and extent of the tailings deposition if the upper 60 meters of the final dam were to fail. The model does not consider the rockfill above the failure plane that would also displace and in reality reduce the extent of tailings discharge.
		Ultimate Dam Failure Results - Jeyapalan Model
		• The results of the model analysis utilizing the following input parameters:
		  • Estimated average values were determined from the probable minimum and maximum values of the mine tailings yield strength and plastic viscosity reported by Jeyapalan;
		    ▪ Yield strength of 4.08 kPa;
		    ▪ Plastic viscosity of 2.45 kPa*s;
		  • Total unit weight of 13.5 kN/m^3 for the mine tailings; and
		  • Bed slope of 0.7%.

		• Results indicated a total runout distance of approximately 1.6 kilometers. • Assuming, that this is measured from base of the breach, the maximum extent of the tailings would be just upstream of the confluence with the Abrud River. Estimates of the tailings volume that would be released under the two scenarios described above is: -Starter Dam Failure Scenario – 5.3 M m3 -Final Dam Failure Scenario – 27.7 M m3 These volumes match the expected inundation area/distance predicted by the Jeyapalan model. Conclusions: Given the dam break scenarios provided by the EIA team, the run-out distances of tailings material is conservatively estimated to be between 0.6 to 1.6 kilometres. This model indicates that tailings material will not reach the Abrud River. This analysis is only intended to represent the extent of solid tailings material release. The impact of decant water and tailings pore water release was modelled separately. Impact from dissolved constituents and some finer suspended sediment will extend further downstream. However, the bulk of the solid tailings mass will be deposited in the area predicted by the modelling. References of the Jeyapalan model: 1. Jeyapalan, J.K., Duncan, J.M., Seed, B.H., "Analysis of Flow Failures of Mine Tailings Dams", Journal of Geotechnical Engineering, ASCE, Vol. 109, No. GT2, Feb., 1983, pp. 150-171 2. Jeyapalan, J.K., Duncan, J.M., Seed, B.H., 1982, "Investigation of Flow Failures of Mine Tailings Dams."
057	When analyzing the cross-border impact, the most relevant fact is the cyanide concentration (WAD, total and free) which may reach the value of 1.3 ppm. In the summary, however, a concentration of "only" 0.03-0.5 ppm is mentioned. What are the real values produced by this model? The above assertion is only supported by a single, deficient table which basically only contains the final results of a few scenarios. The precise flow kilometers, for example, are missing in relation to the mentioned cities, as well as the rate of the water discharge on the examined river sections and substantive data to support the	The EIA Study Report contains details of a risk assessment to an appropriate level for EIA purposes that addresses hazards and risks. This includes the risk of accidents that could give rise to the release of tailings solids and liquids. It is concluded that this risk is at an acceptably low level because of the very high standards of design applied and this is fully in line with both BAT under the EU mining wastes Directive as well as provisions under the EU Seveso II Directive. For the purposes of this level of study, it was appropriate to use "worst case" values for significant pollutants such as cyanide to demonstrate the low concentrations that would be experienced, even in the case of a large-scale spillage. Nevertheless, it is accepted that stakeholders have expressed concerns at the public meetings regarding the outcome of a large tailings spill, irrespective of the probability of this happening. RMGC has therefore commissioned the creation of a dynamic hydro chemical model. This will provide a forecast of pollution downstream of the site under various scenarios, including a large release of tailings and will detail concentrations of the parameters of concern, including cyanide and heavy metals. This will be reported along with the responses to the questions posed by stakeholders. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report.

	results.	The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions.

		For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
058	The data (in case of tailings concentration in TMF) only relates to an average of 4-5 ppm discharged cyanide concentration. Scenarios relating to a higher cyanide concentration are not discussed. (The cyanide pollution in the Baia Mare incident was considerably greater. If - in case of TMF - only the 10 ppm concentration set out in the mining waste directive of the EU could be ensured, greater pollution would occur, and a larger concentration is not indicated in the scenarios.) Moreover if cyanide concentration would be around 1.3 ppm in the outlet water streams, as described in the impact study that would be 13 times higher than the threshold value!	The project will be required to limit discharged effluent concentrations of WAD cyanide to less than 10 mg/L released to the TMF. It is presumed that if this limit cannot be met the project will not be allowed to operate and, therefore, would not be permitted. To ensure that this limit is not violated, the actual targeted effluent value will need to be lower. A realistic maximum effluent value may be 7 mg/L exiting the cyanide detoxification process prior to discharge to the TMF. Cyanide degradation in tailings facilities is well documented, and this, combined with dilution from rainwater, will result in a further reduction in the concentration of cyanide within the TMF. Cyanide degradation and dilution in the TMF was specifically modeled for the EIA and is discussed in detail in Volume 25, Plan F – Tailings Management Facility Management Plan, Section 3.3. This modeling suggests that the average concentration in the TMF will be approximately 50 % of that discharged to the TMF impoundment. In fact, when a WAD cyanide concentration of 10.2 mg/L was modeled, the estimated concentration value within the TMF pond ranged from 2 to 6 mg/L annually. For these reasons, the modeled use of 4 to 5 mg/L in water resulting from an accidental discharge is reasonable, if not conservative. Comparisons to other incidents where higher concentrations (by many factors) were contained are not valid comparisons to the proposed TMF and Process (including the cyanide detoxification circuit). It should also be noted that the estimation of approximately 1.3 mg/L in the receiving streams is based on conservative mass balance assumptions, which will result in higher that realistic concentrations, and an event (dam failure) that is very unlikely given the safety factors built into the TMF. A more sophisticated and realistic modeling approach is being developed by RMGC. The results of this will be available for review upon publication. Taken in this context (where some of the conservatism is taken out of the model in favor of more realism), the concentrations will likely approach the threshold level for this very unlikely model scenario.
059	Several references are then made to models, yet there are no accurate references which can be verified.	Various models have been constructed to help assess various components of the TMF. These models are discussed and referenced in Volume 25, Plan F Tailings Facility Management Plan. As discussed in Section 3.3 cyanide degradation modeling was conducted for the TMF decant pond, and seepage modeling is discussed in Section 3.4. Dam stability modeling is presented and discussed in Section 4.4. The discussions and results presented in the EIA are summaries. Details of the models are presented in specific engineering reports. More detailed information can be provided if specific concerns are identified.
060	It would be necessary to review in detail the quantitative definition of risks and results of every series of possible serious accident and prepare a report on these. It is	It is possible that the quantitative definition of the risks is too sketchy and, therefore, the risk elements associated to the individual impact of the potential serious accidents cannot be well understood by the interested public; but we believe that the results of the detailed analysis of the potential major accident scenarios and the conclusions are drawn up in such a way that they make a clear and suggestive enough presentation.

	important to understand the risk elements produced by every individual impact.	The risk definitions are given in the “Risk chapter” of the EIA. One can insist upon the R = F*S equation, where R is the risk, F – frequency or probability (event/year) and C - consequences (no. of victims/event), also taking vulnerability into consideration, at the same time. The Report to the EIA contains risk identification, description, analysis and assessment for the two main fields: natural and anthropogenic disasters. The methodologies presented in the Report are also structured on the risk definitions. It is underlined that the overall structure of this chapter is based on these issues. The definitions we used are selected from the international literature (American Institute of Chemical Engineers: *Guidelines for Chemical Process Quantitative Risk Analysis*, New York, 1989; Trevor Kletz, *Hazop and Hazan*, 4^{th} edition, 1999, p. 95) and are used at the EU level and national level. The frequency level decides the choice of qualitative or quantitative risk analysis. It is shown that a frequency of 10^{-8} event/year is the range of the quantitative analysis.
061	It is not clear why diagram 7.24 depicts both social and individual risks in the same diagram. Generally the individual risk curves are illustrated on the map as individual risk curves, and their value is determined by the coordinates and distances and impacts produced as consequences.	It is true that practically, individual risks calculation is conducted according to the procedure that you have mentioned and that the FN chart only presents the line of social risk. We believe that EIA is both a technical study and also an informative document for the public, and we consequently believed that it is more illustrative to present the individual and social risks on the same chart.
062	It would be necessary to prepare some kind of risk classification (ranking), considering the total possible serious accident event series, in order that the impact of the total event series to be incorporated in the full risk.	A major chapter of the EIA report was dedicated to the identification of risks for the project. In addition, this chapter provides a discussion of the mitigation measures for each risk and how they were incorporated into the project designs. It is recognized that risk identification is difficult due to the number and diversity of events that can be envisioned. The EIA report cannot assume to cover all of he potential risks associated with the project. However, it has attempted to identify and address the most relevant risks. The extent of risk assessment and the intensity of the prevention and mitigation measures should be proportional to the risk involved and therefore only the risks that have been considered important have been assessed in detail. Each is described below. In the larger sense, the entire EIA report is focused on the assessment of impacts and their associated mitigation. Specifically, Chapter 4 of the EIA presents that impact assessment of the project. The following discussion presents a summary of the impact discussed in the EIA. As far as natural and technological risks assessments are concerned, Chapter 7, “Risk Cases”, from the Report on Environmental Impact Assessment, emphasizes the fact that safety and prevention measures, the implementation of the environmental management and risk systems are mitigating the consequences to acceptable levels as compared to the most restrictive norms, standards, the best practices or national and international

		recommendations in the field. The risk level has been established as moderate and so, socially acceptable. The extension of the risk assessment and the intensity of the prevention and mitigation measures of the consequences should be proportionate to the risk involved. Selection of a specific mitigation technique is depends on the analyzed accident scenario. More detailed assessments are conducted for accident scenarios that, based on the qualitative assessment are found to be potentially major, of probability more than 10^{-6} (reduced recovery periods of 1/1,000,000) meaning that they could have major consequences therefore, elevated associated risk, a higher risk level than 9 to 12 (on a scale of 1-25). In order to put this into context, the common action of walking on the street or developing everyday activities have an accident ocurrence probalility twice higher than within the framework of industrial activities that use hazardous substances.
063	With regard to Hungarian SEVESO regulation, the maximum and minimum risk criteria do not correspond to criteria considered in the study. In consideration of such criteria, the social risk curve in the study is between the Hungarian maximum and minimum risk criteria levels which means that risk reducing measures are required.	The study on the Environmental Impact Assessment has been prepared in compliance with the Romanian legislation including with the SEVESO provisions. Fig. 7.29 and 7.30 present comparations of several risk levels, which are socially acceptable and used in risk assessment international practice. Within the risks assessment, we have considered that the application of the ALARP principles („As Low As Reasonably Practicable”) is adequate and compliant with the provisions of the Romanian legislation. It is possible that the Magyar legislation regarding the application of SEVESO provisions may be more restrictive and consequently the measures included in RMGC's Project may be insufficient in order to lower the risks below the minimum stipulated level.
064	It is also necessary to provide the applied (validated and verified) software codes for the reliability analyses and consequence and risk analyses.	The **SLAB View** software is the Windows interface used for SLAB model and it has been developed by **Lakes Environmental Software**, a Canadian-based Company**.** The SLAB model is recognized and certified by U.S. EPA (United States Environmental Protection Agency). The **EFFECTSGis 5.5** software has been developed by **TNO**, a Netherlands-based Company. The software models rely on “Yellow Book”, recognized at international level as a standard in preparing safety studies. CRAIM holds user license for both **SLAB View** and **EFFECTSGis 5.5**.
065	The process of modeling and accurately calculating the on-site health and environmental risks is not presented. It is necessary to describe the detailed method of the calculation process of environmental and health risks relating to all considered event	Within the subchapter 6.7.5 of the chapter 7 “Risks” of EIA, “the Assessment of the Site Health and Environmental Risks for the Rosia Montana project” is prepared by using the Methodology for fast assessment of health and environmental risk presented in subchapter 6.7.4.1. This methodology is available and may be accessed also on the website that is stipulated in the BIBLIOGRAPHY (www.euro.who.int/watsan/CountryActivities - “Pilot Project on Environment and Health Rapid Risk Assessment in Secondary Rivers of the Lower Danube Basin”). Since Hungary, Bulgaria and Romania have applied and implemented this methodology in some chosen areas, it has been considered well-known and consequently the estimation method, the one that has been used in the evaluation process of the environmental and health risks, has not been minutely displayed. Since this detailing has

	series. It would be practical to understand why the quantitative values of tables 7-34 were produced.	been considered necessary and useful, we present the calculation of the values presented in table 7-34. Site General Index (SGI) Represents the probability that something went wrong at the industrial facilities, leading to a potential accident due to the existence of two concurrent and simultaneous causes: - Technological design represented by the Site Technological Factor (STF), defined as the sum of the values associated to each of the following elements: • Site Age; • Process Control; • Type of Operations; • Operating conditions; • Loading/unloading operations. The selected elements are thought to be extremely representative for the fast assessment of industrial risk. For each of these elements, a potential hazard level (category) is presumed and a relevant numeric parameter is assigned (a value ranging from 1 to 10). This parameter may involve an intermediary value from a specific range, in order to take into account the specific status of the analyzed site. A): Site Age

THE INVENTORY'S REFERENCE NUMBER	CATHEGORY	THE VALUE OF THE A PARAMETER
a. 1)	Between 1 an 5 years	1
a. 2)	Between 5 and 20 years	5
a. 3)	Over 20 years	10

B) Process Control

THE INVENTORY'S REFERENCE NUMBER	CATHEGORY	THE VALUE OF THE B PARAMETER
b. 1)	High level of technology	1
b. 2)	Medium level of technology	5
b. 3)	Low level of technology	10

C) Type of Operations

THE INVENTORY'S REFERENCE NUMBER	CATHEGORY	THE VALUE OF THE C PARAMETER
c. 1)	Continuous cycle of production	1
c. 2)	Semi-continuous cycle of production	5
c. 3)	Discontinuous cycle of production	10

D) Operating Conditions of the Industrial Installation

THE INVENTORY'S REFERENCE NUMBER	CATHEGORY	THE VALUE OF THE D PARAMETER
d. 1)	Processes developed at low temperatures and pressures	1
d. 2)	Processes developed at high pressures (over 30 bars) or at high temperatures (over 200ºC)	5
d. 3)	Processes developed at very high pressures and temperatures	10

E) Loading /Unloading Operations

THE INVENTORY'S REFERENCE NUMBER	CATHEGORY	THE VALUE OF THE E PARAMETER
e. 1)	The number of loading/unloading operations – below 50 per year	1
e. 2)	The number of loading/unloading operations – between 50 and 300 per year	5
e. 3)	The number of loading/unloading operations – over 300 per year	10

The site technological factor (STF) is defined as the sum of values associated to each element identified within the abovementioned tables.

$$STF = \frac{A+B+C+D+E}{50} x10$$

Estimation conducted for RMGC:

Parameter	Processing Plant	TMF's pond	Cetate Dam	Explosives Storage	The entire site
A	4	6	4	4	4
B	1	2	3	1	2
C	1	1	1	4	1
D	2	1	1	1	2
E	10	10	10	10	10
STF	18	20	19	20	19

- The level of organization of the environmental and health management, represented by (SOF).

Three potential hazard categories have been defined according to the existent information and data, as well as with the parameters of the corresponding hazards. This factor is calculated according to the following table.

F) Organization Level

Reference inventory number	Category	The value of parameters (1-10)
f.1)	Maximal reference level (Implemented Systems for the management of environment and safety)	1
f.2)	Medium reference level	5
f.3)	Minimal reference level	10

The Site Organization Factor is equal with the value of the F parameter.

$$SOF = F$$

Estimation conducted for RMGC:

Parameter	Processing plant	TMF pond	Cetate Dam	Explosives Storage	The entire site
SOF	1	1	1	1	1

The two previous factors, STF and SOF will be combined in order to define the Site General Index (SGI) by using the following ratio:

$$SGI = \sqrt{STF \cdot SOF}$$

Estimation conducted for RMGC:

Parameter	Processing plant	TMF pond	Cetate Dam	Explosives Storage	The entire site
SGI	1,9	2	1,95	2	1,95

Dangerous Substance Indexes (DSI)
It is estimated based on the total amount of dangerous substances handled and/or stored on the site, in correlation with the relevant quantity under Annex 1 of the Seveso Directive.

The Dangerous Substance Index (DSI) is based on the total quantity of dangerous substances handled and/or stored on the site, which are defined by the specific Dangerous Substance Factor (DSF) calculated as follows:

$$DSF = \sum \frac{q_i}{Q_i}$$

Where: qi is the quantity of i dangerous substance/chemical compound (or the category of dangerous substance) inventoried and complies with Part 1 or 2 of Annex 1 of the Seveso II Directive.
Qi is the limit quantity relevant for Parts 1 and 2 (column 2) of the abovementioned annex.
With the help provided by the DSF factor, the DSI is established by using the following formula:

The DSF value	The DSI value
0<DSF≤10	DSI=1/5*(DSF)
DSF>10	DSI=2*Log(DSF)

For this formula is calculated using base-10 logarithm.

The inventory of the dangerous substances which includes the quantities of qi substances used for the calculation is presented in the table of ANNEX 2 of the EIA's Chapt.7 Risk.

Estimation conducted for RMGC:

Parameter	Processing plant	TMF pond	Cetate Dam	Explosives Storage	The entire site
DSI	8,71	6,89	6	2	8,84

Natural Hazard Index (NHI)

Is a combination of independent factors that are relevant for one or more natural hazards (areas exposed to frequent flooding, high earthquake risks, frequent landslides, earth movements or high soil instability).

NHI is a combination of singular factors relevant for one or for several natural hazards, according to the following table:

CATHEGORY	THE NATURAL HAZARD FACTOR
Area affected by flooding	Yes: factor F = 1
	No: factor F = 0
High earthquake risks' area	Yes: factor S = 1
	No: factor S = 0
Frequent landslides, earth or soil movements, of high instability which affect the area	Yes: factor L = 1
	No: factor L = 0

The combination of these factors provides the value of NHI, as follows:

$$\mathbf{NHI} = F + S + L$$

<u>Estimation conducted for RMG:</u>

Parameter	Processing plant	TMF pond	Cetate Dam	Explosives Storage	The entire site
F	0	1	1	0	0
S	0	0	0	0	0
L	0	0	0	0	0
NHI	0	1	1	0	0

Site Hazard Index (SHI) is a multiple parameter representing the potential hazard (probability of occurrence) of a major accident, without considering further environmental and human health consequences.

The site hazard indicator (SHI) is provided by the formula:

$$SHI = \sqrt{\left(\frac{[SGI + NHI] \times 10}{13}\right) \times DSI}$$

where: SGI represents the Site General Index
NHI is the Natural Hazard Index

<table>
<tr><td></td><td></td><td>DSI is the Dangerous Substance Index

Table 7-34 summarizes the values estimated for the abovementioned indexes.

<table><tr><td>Indicator</td><td>Processing plant</td><td>TMF pond</td><td>Cetate Dam</td><td>Explosives Storage</td><td>The entire site</td></tr><tr><td>SGI</td><td>1,9</td><td>2</td><td>1,95</td><td>2</td><td>1,95</td></tr><tr><td>DSI</td><td>8,71</td><td>6,89</td><td>6</td><td>2</td><td>8,84</td></tr><tr><td>HHI</td><td>0</td><td>1</td><td>1</td><td>0</td><td>0</td></tr><tr><td>SHI</td><td>3,56</td><td>3,99</td><td>3,69</td><td>1,75</td><td>3,64</td></tr></table>BIBLIOGRAPHY
(www.euro.who.int/watsan/CountryActivities - “Pilot Project on Environment and Health Rapid Risk Assessment in Secondary Rivers of the Lower Danube Basin”).</td></tr>
<tr><td>066</td><td>We do not agree with the risk analysis of the project's alternatives; we disagree with the rejection of version "0", that is, the non-implementation of the project. This solution does not increase the current risks.
The management of such risks is ensured through the ecological rehabilitation of the Minvest facilities in the region and we understand that the necessary funds are available in such purpose. The rehabilitation plans will manage the risks related to the abandoned dumps and the ARD related problem.</td><td>The EIA study report presents a comparative environmental assessment of the proposed project and its alternatives, including the “null alternative”, as required under EIA guidelines. The “null alternative” is shown to be clearly less favourable, having in view the applicable assessment criteria. Chapter 5 of the EIA Study Report provides an assessment of the “null or no action” alternative and the appendix to this chapter sets out a detailed characterisation of the RMP site as it is today, together with costs for remediation (with no RMP). Chapter 5 confirms that the “does nothing” option for the site has significant negative implications for the environment and the community. The appendix shows that acting only to remediate the site (with no regeneration of industry, re-training or re-building of community infrastructure and services) would cost in excess of Euros 20M. It would therefore appear that remediation of the site (without the project) would severely strain the financial resources available to the Romanian Government and what could be done in the best circumstances would fall significantly short of the benefits forecast to accrue from the construction and operation of the RMP. Moreover, it is clear that the RMP would in effect release Government administered money that would otherwise have to be spent on remediation work at Rosia Montana for use in other regions that are not able to take the benefit of the private inward investment via the RMP.
Chapter 5 of the EIA Report on the environment impact assessment study (EIA) (Assessment of Alternatives) presents an assessment of all the alternatives that are appropriate to consider for the EIA and in line with the EIA Terms of Reference as issued by MEWM. This includes the “no-project” alternative.

The Chapter also examines alternative locations for key facilities as well as alternative technologies for mining, processing and waste management, in line with best practice and as compared against published EU best available techniques (BAT) documentation.

The EIA considered alternative developments – including agriculture, grazing, meat processing, tourism, forestry</td></tr>
</table>

		and forest products, cottage industries, and flora/fauna gathering for pharmaceutical purposes – and concluded that these activities could not provide the economic, cultural ands environmental benefits brought by the Roşia Montană Project (RMP). The examination of alternatives also evaluated the best mining technology, duration and staging of the project, mining and processing technologies, environmental management practices, site options for waste management facilities, transportation routes, and measures to prevent and minimize environmental impact. For more detail on the facilities at the old mine site the reader is reminded that this falls under the jurisdiction of RosiaMin. The old mine is undergoing conservation design as required by legislation. RosiaMin has prepared a “cessation action plan” that needs to be endorsed through a Governmental Decision in order to assign the necessary funds to prepare the design (“closure technical project”) of a Mine Closure and Rehabilitation Plan. After this design is approved and endorsed, the necessary funds will be budgeted for the development of specific closure and rehabilitation works. In this plan all existing facilities will be documented. Taking into account the national strategy prepared for the mining sector for 2004-2010 that adopts to goal of “*privatization of deposits that may be economically developed and closure of those under the economic limit* “, and that the largest gold deposit from Europe exists in Rosia Montana, an optimum solution to reinvigorate the regional economy must consider not just the closure but also the re-development of the Rosia Montana mine site. RMGC has committed to do this in conformity with the Romanian legislation, the European Union directives, BAT (Best Available Techniques), BMP (Best Management Practice) and international guidelines and recommendations. The result of this commitment is contained in the EIA documentation which contains, in addition to the EIA Report, the Baseline Reports prepared during the period 1999-2006 and the Management Plans prepared as part of the environmental impact assessment process.
067	We find the rejection of cyanide-free technologies unacceptable without more in-depth tests. Cost-profit analyses would also be necessary to enable the assessment of such alternatives.	Alternative technologies for the leaching of gold are laid out in detail in Section 4.3 of Chapter 5 of the EIA Study report. Eight alternatives are compared and ranked using 11 Best Available Technology (BAT) criteria, including cost and environmental performance, toxicity, etc. It is concluded that use of cyanide is BAT and use of other lixiviants is not BAT and as such, there is no justification for investigating these further. This approach is supported by practice worldwide and within the EU.
068	The two page description does not list already known deficiencies, problems and uncertainties, therefore, it is unacceptable! The Hungarian request, formulated in clause 8 of the scoping document, is not satisfied, namely, that "the	Chapter 8 of the EIA Study Report provides a summary of the difficulties encountered in assessing impacts of the RMP at a general level. These difficulties applied to all of the component studies. Detailed description of uncertainties and problems for the component studies is included in Chapter 4 of the report, as appropriate to the objectivity of the study undertaken. This makes it much easier for the reviewer to judge the validity and certainty of the conclusions presented for each environmental issue.

	analysis should examine in detail the deficiencies and uncertainties underlying knowledge".	
069	The most important chapter from a Hungarian point of view is rather limited in describing the analysis of transboundary impacts. Unfortunately, instead of a well presented, "clean" material, there are only references to the fact that detailed information is contained in various volumes. Accurate information could have been provided in this volume, too, given the frequent repetitions in the other volumes.	Chapter 10 of the EIA Study report sets out the conclusions from the overall EIA studies that are important from a transboundary perspective. It is concluded that the RMP has no significance, other than risk of large-scale accident, in regard to possible transboundary impacts and as a result, the Chapter is quite short in length. However, it is stressed that this conclusion is based on the evidence presented in the remainder of the EIA report and it is not necessary or practicable to repeat all of that in Chapter 10. Chapter 10 explains how all of the potential impacts were screened in regard to possible transboundary issues and from that the important points are fully discussed so that the conclusions drawn are clear and transparent. The risk of surface water pollution arising from a large-scale accident is identified and placed clearly in context with cross-reference to Chapter 7 where this issue is dealt with in detail. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied

		to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
070	This section of the documentation is incomplete and fails to meet the provisions of the Espoo convention". The listing of various international regulations is insufficient in itself, moreover, they are not complied with; for example, the very important conclusion that the opening of the mine will have a positive impact on the environment is not proven, and even less so the conclusion that disadvantages would arise from the "zero solution" in Hungary's impacted area if the project were not implemented.	Chapter 10 of the EIA Study report sets out the conclusions from the overall EIA study that are important from a transboundary perspective. It is concluded that the RMP has no significance, other than risk of large-scale accident, in regard to possible transboundary impacts and as a result, the Chapter is quite short in length. However, it is stressed that this conclusion is based on the evidence presented in the remainder of the EIA report and it is not necessary or practicable to repeat all of that in Chapter 10. Further, it is considered that the EIA Study Report supports an EIA *process* that is in compliance with the Espoo Convention (the Convention sets out requirements for a consultative process and not detailed specifications for documentation). We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating

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		significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Aries-Mures river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mures joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mures River Modelling Program and the full modelling report is presented in **Annex 5.1.**

071	It is unacceptable that a 21 page material starts discussing fundamental issues only on page 14 and only by means of table descriptions.	Chapter 10 of the EIA Study report sets out the conclusions from the overall EIA study that are important from a transboundary perspective. It is concluded that the RMP has no significance, other than risk of large-scale accident, in regard to possible transboundary impacts and as a result, the Chapter is quite short in length. However, it is stressed that this conclusion is based on the evidence presented in the remainder of the EIA report and it is not necessary or practicable to repeat all of that in Chapter 10. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it.

		Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
072	We disagree with the assertion that the pollution of surface waters, ARD pollution could only happen on a local/regional level- the contrary has been proven by numerous pollution incidents in the past. The study, too, makes many references to instances of "historical" pollution which continuously imposes a load on water flows spreading to Hungarian territory. The same applies to accidents related to the tailings management facilities.	The EIA Study Report includes a detailed assessment of the impact of the project on downstream watercourses and it is very clear that removal of current sources of pollution (including ARD-generated pollution) by the construction of the RMP would have a positive impact of the quality of the Corna and Rosia valley streams. However, considering the existing pollutant load of the Abrud river (that results from contamination from many sources other than Rosia Montana), this improvement, and while measurable would not be significant in terms of the class of the water. Further downstream of the site, into the Aries river and beyond, the effect of removing pollution from Rosia Montana becomes still less and would not be measurable at the Hungarian border, although as noted in Chapter 10 of the EIA Study Report (Section 4.1), the “influence will be beneficial” and this is in line with the objectives of the Water Framework Directive (WFD) as applied to the Danube Basin. Nevertheless, it is accepted that stakeholders have expressed a wish to see more information on river quality downstream of the site. RMGC has therefore commissioned the creation of a dynamic hydro chemical model. This will provide a forecast of river water quality downstream of the site under various scenarios (including large scale accident, irrespective of low probability), and will detail concentrations of the parameters of concern, including cyanide and heavy metals. This will be reported along with the responses to the questions posed by stakeholders. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed

		project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.

The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions.

The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions.

The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană.

The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Aries-Mures river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mures joins it.

Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary.

The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions.

For more information, an information sheet presenting the INCA modelling work is presented under the title of the

		Mures River Modelling Program and the full modelling report is presented in A**nnex 5.1.**
073	On the basis of the above, the assertion that a possible dam burst would not cause any cross-border environmental impacts is unsubstantiated and unacceptable.	The EIA Study Report contains details of a risk assessment to an appropriate level for EIA purposes that addresses hazards and risks. This includes the risk of accidents that could give rise to the release of tailings solids and liquids. It is concluded that this risk is at an acceptably low level because of the very high standards of design applied and this is fully in line with both BAT under the EU mining wastes Directive as well as provisions under the EU Seveso II Directive. Nevertheless, it is accepted that stakeholders have expressed concerns at the public meetings regarding the outcome of a large tailings spill, irrespective of the probability of this happening. RMGC has therefore commissioned the creation of a dynamic hydro chemical model. This will provide a forecast of pollution downstream of the site under various scenarios, including a large release of tailings and will detail concentrations of the parameters of concern, including cyanide and heavy metals. This will be reported along with the responses to the questions posed by stakeholders. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper,

		chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
074	In the course of analyzing cross-border impacts, conformity with the international regulations below should have been analyzed: • OECD Guidelines for Multinational Enterprises (especially Chapter V. - Environment, p.-p. 3., 4. and 5.), • OECD Guiding Principles for Chemical Accident Prevention, Preparedness and Response (2003.) + OECD Guidance on Safety Performance Indicators (2003.),	Chapter 10 of the EIA Study report sets out the conclusions from the overall EIA study that are important from a transboundary perspective. It is concluded that the RMP has no significance in regard to possible transboundary impacts other than risk of large-scale accident and as a result, the Chapter is quite short in length. However, it is stressed that this conclusion is based on the evidence presented in the remainder of the EIA report and it is not necessary or practicable to repeat all of that in Chapter 10. The regulations quoted are important from the point of view of the pre-construction permitting and operation of the RMP as part of satisfying IPPC requirements and other matters, such as carriage of goods and equipment. However, they have no relevance to the assessment of transboundary impacts for the RMP. Prior to construction, the company would have to obtain permits and consents and prepare management plans and protocols that are necessary under these and many other regulatory controls applying to any large-scale industrial operation. The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no

	• UN ECE Convention on the Transboundary Effects of Industrial Accidents (1992.), • UN ECE Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) – Geneva, 30 September 1957 (current text with all amendments in force), • OTIF Regulations concerning the International Carriage of Dangerous Goods by Rail, 2005 (RID), • UN ECE Protocol on Civil Liability and Compensation for Damage Caused by Effects of Industrial Accidents on Transboundary Waters (2003.), • UN ECE Convention on Civil Liability for Damage Caused during Carriage of Dangerous Goods by Road, Rail and Inland Navigation (CRTD), • Rotterdam Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade (1998.), • UNEP APELL (Awareness and Preparedness for Emergencies at Local Level) for Mining (2003.), • UNEP/ICOLD1/ICME2 –	significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Aries-Mures river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mures joins it. Because of dilution and dispersion in the river system, and of the initial EU BAT-compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the TMF to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of the existing mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mures River Modelling Program and the full modelling report is presented in **Annex 5.1.**

	Environmental Regulation for Accident Prevention in Mining: Tailings and Chemicals Management; Mining and Sustainable Development3, • UNEP/WB-IFC4/MMSD5 – Finance, Mining and Sustainability. • UN ECE Convention on Protection and Use of Transboundary Rivers and International Lakes. 76/464/EEC Discharge of Dangerous Substances Directive.	
075	There is incorrect data in Chapter 4.1 of the same volume (e.g. the length of the Mures River in Hungary is indicated as being 20 km).	The length of the Mures River in Hungary was stated to be *approximately* 20 km. The exact length is closer to 22.9 km. This has no significance for the assessment of transboundary impact. The EIA team is not aware of any other so-called inaccuracies in Chapter 4.1. The EIA Report (Chapter 10 Transboundary Impacts) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mures and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană.

076	The claim that the planned investment does not cause a major improvement in the quality of the Abrud river seems contradictory for the improvement of the current condition is one of the chief motivating factors behind the opening of the mine. Obviously any measure could result in a cross-border impact.	The EIA Study Report includes a detailed assessment of the impact of the project on downstream watercourses and it is very clear that removal of current sources of pollution by the construction of the RMP would have a positive impact on the quality of the Corna and Rosia valley streams. However, considering the existing pollutant load of the Abrud river (that results from contamination from many sources other than Rosia Montana), this improvement, and while measurable would not be significant in terms of the class of the water. Further downstream of the site, into the Aries river and beyond, the effect of removing pollution from Rosia Montana becomes still less and would not be measurable at the Hungarian border, although as noted in Chapter 10 of the EIA Study Report (Section 4.1), the "influence will be beneficial" and this is in line with the objectives of the Water Framework Directive (WFD) as applied to the Danube Basin. Nevertheless, it is accepted that stakeholders have expressed a wish to see more information on river quality downstream of the site. RMGC has therefore commissioned the creation of a dynamic hydro chemical model. This will provide a forecast of river water quality downstream of the site under various scenarios, and will detail concentrations of the parameters of concern, including cyanide and heavy metals. This will be reported along with the responses to the questions posed by stakeholders. We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană.

		The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1.
077	Assertions made earlier in several places - unsupported with evidence - that the pollution of the waters and the dam burst can only cause local problems are unacceptable. The same applies to risks underlying transports.	The EIA Study Report contains details of a risk assessment to an appropriate level for EIA purposes that addresses hazards and risks. This includes the risk of accident that could give rise to release of tailings solids and liquids. It is concluded that this risk is at an acceptably low level because of the very high standards of design applied and this is fully in line with both BAT under the EU mining wastes Directive as well as provisions under the EU Seveso II Directive. Nevertheless, it is accepted that stakeholders have expressed concerns at the public meetings regarding the outcome of a large tailings spill, irrespective of the probability of this happening. RMGC has therefore commissioned the creation of a dynamic hydro chemical model. This will provide a forecast of pollution downstream of the site under various scenarios, including a large release of tailings and will detail concentrations of the parameters of concern, including cyanide and heavy metals. This will be reported along - with the responses to the questions posed by stakeholders We appreciate that there is concern about transboundary impacts and have worked extensively with independent experts and scientists to fully assess all possibilities. These assessments, including a just-completed study of

		catastrophic failure scenarios by The University of Reading, have concluded that the Roşia Montană Project has no transboundary impact. A full copy of the University of Reading study can be found in the reference documents included as an annex to this report. The Environmental Impact Assessment Report (EIA) (Chapter 10 *Transboundary Impacts*) assesses the proposed project with regard to potential for significant river basin and transboundary impacts downstream which could, for example, affect the Mureş and Tisa river basins in Hungary. The Chapter concludes that under normal operating conditions, there would be no significant impact for downstream river basins/transboundary conditions. The issue of a possible accidental large-scale release of tailings to the river system was recognized to be an important issue during the public meetings when stakeholders conveyed their concern in this regard. As a result, further work has been undertaken by RMGC to provide additional detail to that provided in the EIA Report on impacts on water quality downstream of the project and into Hungary. This work includes modelling of water quality under a range of possible operational and accident scenarios and for various flow conditions. The model used is the INCA model developed over the past 10 years to simulate both terrestrial and aquatic systems within the EUROLIMPACS EU research program (www.eurolimpacs.ucl.ac.uk). The model has been used to assess the impacts from future mining, and collection and treatment operations for pollution from past mining at Roşia Montană. The modelling created for Roşia Montană simulates eight metals (cadmium, lead, zinc, mercury, arsenic, copper, chromium, manganese) as well as Cyanide, Nitrate, Ammonia and dissolved oxygen. The model has been applied to the upper catchments at Roşia Montană as well as the complete Abrud-Arieş-Mureş river system down to the Hungarian Border and on into the Tisa River. The model takes into account the dilution, mixing and phsico-chemical processes affecting metals, ammonia and cyanide in the river system and gives estimates of concentrations at key locations along the river, including at the Hungarian Boarder and in the Tisa after the Mureş joins it. Because of dilution and dispersion in the river system, and of the initial European Union Best Available Techniques (EU BAT) - compliant technology adopted for the project (for example, the use of a cyanide destruct process for tailings effluent that reduces cyanide concentration in effluent stored in the Tailings Management Facility -TMF- to below 6 mg/l), even a large scale unprogrammed release of tailings materials (for example, following failure of the dam) into the river system would not result in transboundary pollution. The model has shown that under worse case dam failure scenario all legal limits for cyanide and heavy metals concentrations would be met in the river water before it crosses into Hungary. The INCA model has also been used to evaluate the beneficial impacts of theexisting mine water collection and

		treatment and it has shown that substantial improvements in water quality are achieved along the river system under normal operational conditions. For more information, an information sheet presenting the INCA modelling work is presented under the title of the Mureş River Modelling Program and the full modelling report is presented as Annex 5.1. RMGC is committed to respecting the Romanian and EU relevant legislation and also to imposing the observation of such obligations also by its suppliers in order to ensure that all requirements for safe transportation of any hazardous materials are met. Our company and our suppliers will adhere to the guidelines of the Cyanides Sector Group of the EU (CEFIC) for storage, handling and distribution of alkali cyanides. CEFIC sets the standards and requires compliance with EU Directives regulating the transport of thousands of different hazardous substances shipped daily throughout the EU with the required ADR license (ADR is the European Agreement concerning the international carriage of dangerous goods by road). RMGC is also a signatory of the International Cyanide Management Code (ICMI), an internationally recognized practice for cyanide management in the gold mining industry; we will also require our suppliers to sign and abide by ICMI and the Roşia Montană plant will be ICMI certified. An ongoing, rigorous and independent audit of the cyanide management system will be followed as well. The International Cyanide Management Code has these, among other, requirements: • Protect communities and the environment during cyanide transport; • Establish clear lines of responsibility for safety, security, release prevention, training and emergency response in written agreements; • Require that cyanide transporters implement appropriate emergency response plans and capabilities, and employ adequate measures for cyanide management. In addition to ICMI terms, the carriage of dangerous goods is subject to EU Directives on Health, Safety and Transport that are translated into regulations for the Member States. Additionally, the EU *Directive* 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage, establishes the general framework for environmental liability including the transport by road, rail, inland waterways, sea or air of dangerous goods or polluting goods. Therefore, in addition to the legal insurance obligations that shall be undertaken by RMGC's suppliers of transportation services, when operations shall commence and upon implementation into the Romanian legislation, RMGC will conform to applicable EU regulations and codes

		regarding insurance, as applicable.
078	The volume containing the waste management plan basically reiterates word for word the descriptions, conclusions already made in volume 10.	This statement is correct up to a point: the Waste Management Plan (Plan B) contains not only a reproduction of the Chapter 3 (Waste) of the EIA Report, but also specific information which belongs in a Management Plan such as responsibilities, management tasks and the embedding of the Plan into the overall scheme of Environmental and Social Management Plans of the entire project, in addition to other “new” information. It is correct that most of the Plan B reproduces Chapter 3 of the EIA. First of all, both documents deal with the same topic (Waste), both are dedicated to the questions of how waste materials impact the environment, health etc., and how these impacts can be minimized or mitigated. They arise from two different legal backgrounds: The Waste Management Plan (B) is required under the EU Mine Waste Directive 2006/21/EC, Article 5. It stipulates that the operator must draw up a Waste Management Plan, which must comply with a certain formal structure and content. Chapter 3 (Waste) of the EIA Report is required as part of an EIA Report according to Ministerial Order MO 863/2001 of Romania. Annex 2, Part II to this Order defines the content and structure of this particular Chapter. Both legal frameworks overlap significantly. Content and structure are very similar in both documents (except that the Management Plan must contain the additional information described above) so that it makes sense to use large parts of one document in the preparation of the other.
079	The chapter contains references to the provisions of Directive 2006/21/EC on the management of waste from extractive industries, but does not contain any specific plans.	The Plan which the stakeholder asks for is addressed by the Waste Management Plan (Plan B, Volume 22) which was prepared according to the requirements of Article 5 of the EU Mine Waste Directive 2006/21/EC.
080	Detailed plans should be elaborated on the basis of the above directive with regard to the following, for example: • Waste management plan (Article 5); • Procedural and material legal obligations relating to the prevention of serious accidents (Article 6, Annex I - accident prevention concept, safety control system, internal and external emergency plan);	The question is assumed to refer to the EU Mine Waste Directive 2006/21/EC, and specific Articles thereof. • A waste management plan (Article 5) has been prepared: Plan B of the suite of Management Plans • Accident prevention concept, safety control system, internal and external emergency plan (Article 6) has been prepared: Emergency Preparation and Spill Contingency Management Plan - Plan I • Construction and control of waste management facilities (Article 11 - e.g. minimization of damage caused in the landscape, reporting obligations, and costs) has been prepared: Tailings Facility Management Plan - Plan F and Waste Management Plan (Plan B), which contains Sections 5.9.4.7 through 5.9.4.11 dedicated to these issues. • Closing, post-treatment and costs thereof (Article 12): A Mine Closure and Rehabilitation Plan (Plan J) has been prepared, which (in Annex I) contains a cost estimate for the closure and rehabilitation phase. • General preventive measures (Article 13): Sections 5.9.4.8 and 5.9.4.9 of the Waste Management Plan (among other documents in the whole suite of documents) are dedicated to these issues. • Availability and amount of financial collateral (Article 14): see below.

	• Construction and control of waste management facilities (Article 11 - e.g. minimization of damage caused in the landscape, reporting obligations, costs); • Closing, post-treatment and costs thereof (Article 12); • General preventive measures (Article 13); • Availability and amount of financial collateral (Article 14).	Information on the Environmental Financial Guarantee ("EFG") is fully discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). RMGC recognizes that mining, while permanently changing some surface topography, represents a temporary use of the land. Thus from the time the mine is constructed, continuing throughout its lifespan, closure-related activities – such as rehabilitating the land and water, and ensuring the safety and stability of the surrounding area – will be incorporated into our operating and closure plans. In România, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD"). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. There are two separate and distinct EFGs under Romanian law. The first, which is updated annually, focuses on covering the projected reclamation costs associated with the operations of the mine in the following year. These costs are of no less than 1.5 percent per year, of total costs, reflective of annual work commitments. The second also updated annually, sets out the projected costs of the eventual closure of the Roşia Montană mine. The amount of the EFG to cover the final environmental rehabilitation is determined as an annual quota of the value of the environmental rehabilitation works provided within the monitoring program for the post-closure environmental elements. Such program is part of the Technical Program for Mine Closure, a document to be

		approved by the National Agency for Mineral Resources (“NAMR”). Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals. The current projected closure cost for Roşia Montană is US$ 76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US$76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine). Under the terms of the EFG, the Romanian government will have no financial liability in connection with the rehabilitation of the Roşia Montană project.
081	The sections of the chapter (Volume 23) on water management, discussing the cleaning of waste water, contain references suggesting that the details will be described in a later version of this management program. The actual version does not contain information related to the operation of the waste water cleaning facilities, the costs of their operation and data on incoming and outgoing waste water.	RMGC will consider the mentioned omissions for inclusion in a future version of this Management Plan. The primary receiving streams for unimpacted water will be the Roşia Stream and Corna Stream. The North and South Storm Water Diversions at the TMF will both discharge into Corna Valley immediately downstream of the Secondary Containment System. The Northern Roşia Valley Diversion Channel extending from the northern flank of the valley will discharge into Roşia Stream immediately downstream of the Cetate Water Catchment Dam and Pond. The diversion channels will be constructed during the construction phase to minimise the volume of clean surface water entering disturbed areas of the site. These diversion channels will be intended to convey water that is not impacted by historical or proposed mining activities. The diversions will reduce the volume of clean water and storm water mixing with possibly site-impacted waters requiring treatment in the mine area, thus reducing the overall treatment requirements and helping to provide for the biological baseflows in downstream streams. An additional objective of the diversions includes protecting structures, stockpiles and active areas from flood flows. Impacts to surface water flows will occur due to direct interception and containment of contaminated and uncontaminated surface water flows by structures constructed during the implementation of the Project. These structures include the Cetate Water Catchment Dam and the mine pits, with their associated diversion channels in the Roşia Valley; and the TMF and SCD with their associated diversion channels in the Corna Valley. Further drainage will be diverted from waste rock dumps in both valleys, from the old mine wastes and low grade ore stockpile and the 714 adit in the Roşia Valley from the operations area. The net result will be the potential to impact the flows in the Roşia and Corna streams and therefore also the Abrud and ultimately the Aries rivers.

		Wherever possible, clean water will be diverted around the facilities to the respective catchments downstream of the Project area, without loss of flow – and so any residual impact on surface water flows in the downstream system will be mainly in respect of loss of contaminated water only. The Project intercepts contaminated water from the Roşia and Corna catchments while diverting as much clean surface water as possible for return to the streams. Nevertheless, some of the treated water from the ARD waste water treatment plant is discharged back to the streams as compensation flow. This amount averages 237.42 m3/hr (66 L/s) over the operational life of the mine (Exhibit 4.1.12, stream 35 of the EIA). This is less than the average baseline flows which total 309.3 m3/hr (85.9 L/s), although it does not include diverted clean water flows. The apparent reduction in flow in the two streams (71.9 m3/hr, 20 L/s) is accounted for almost exactly by the intercepted mine water flows which together total 67.3m3/hr (18.7 L/s) – so the 23% (maximum) reduction in flow is offset by the removal of the most contaminated component. The impact on the River Abrud of the 71.9 m3/hr (20 l/s) reduction is negligible – about 1.4% of its total average flow. Moreover, the Project is committed to maintaining minimum flows in the Roşia and Corna streams of 72m3/hr (20 L/s) and 25.2 m3/hr (7 L/s) respectively. These are the estimated biological compensation baseflows which will be conducive to ecological sustainability when the streams have recovered sufficiently in quality terms to support aquatic fauna and flora. In the case of the Roşia stream lower flows than this minimum flow have already been recorded (see baseline data between 2000 and 2005). The ore processing operation generates metal loaded ARD. In the closed mines, (the mine existing at Roşia Montană) the generation of ARD continues and the management of ARD in modern mining industry includes the closure and post-closure stages, too. The technological process presented in the Roşia Montană project generate two sources of metal loaded ARD: - ARD, important source as far as flows and metallic ions concentrations are concerned; - Tailings slurry resulting from the processing of ore using cyanides. 1. For mine waters, there's a water collection and abstraction system (in the ARD dam Cetate and seepage retention dam Cârnic), monitoring and treatment in a specially designed installation, anticipated to be developed during the construction phase of the project. Treatment will be performed in compliance with BAT, with a large application by pH adjustment and metal precipitation in two steps using lime and carbon dioxide as insoluble compounds (hydroxides, carbonates, hydroxycarbonate).

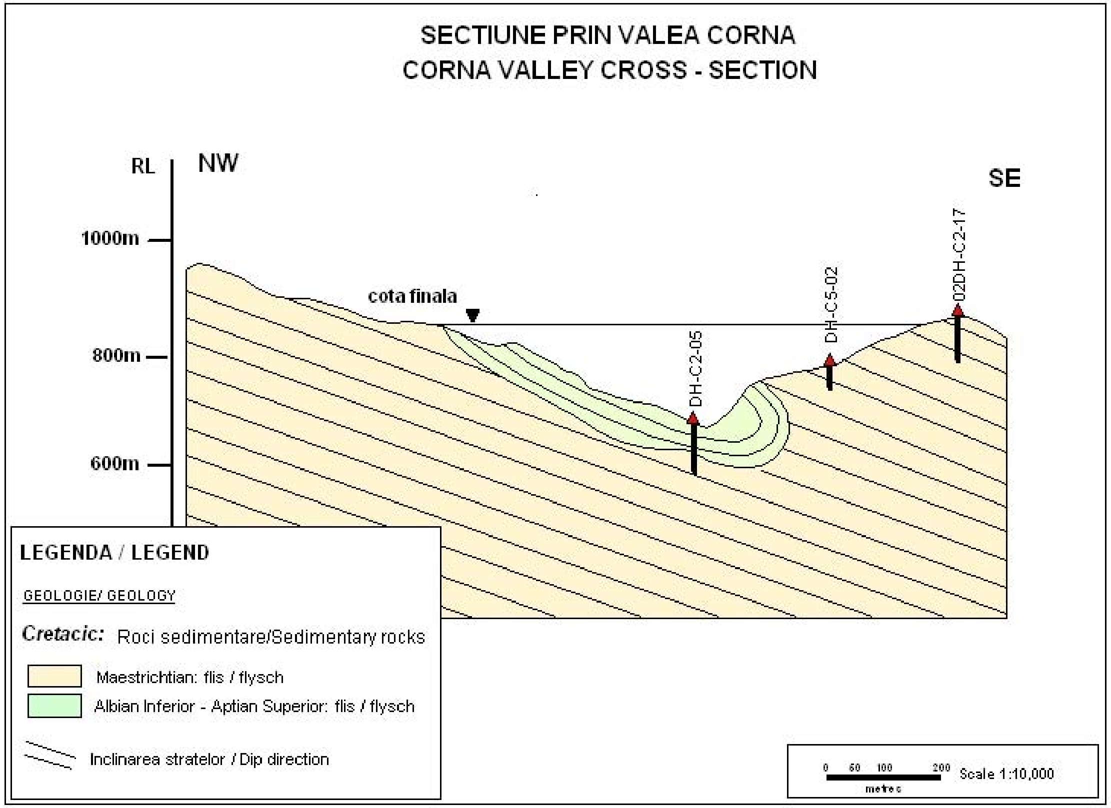
		The treated effluent will be partially reutilized in the process, after the first precipitation stage, therefore it will not get dispersed into the environment, and the final effluent that will comply with the NTPA 001 limits for metals, will be used to maintain environmental baseflows in Roşia and Corna Streams. The slurry will be directed to the TMF. The installation is conceived to function during the operation, closure and post-closure stages of the Roşia Montană Project. During the last three years of the operation period, the passive treatment processes will be tested in the lagoons. These will replace the ARD active treatment plants in the post-closure period, should the result be satisfactory and the NTPA 001 discharge standards will be complied with. 2. INCO process (oxidation with SO2/air) and lime pH 8-10, for treatment of tailings slurry is mainly used for the destruction of cyanides. Concomitantly, given the above conditions, precipitation of heavy metals as hydroxides takes place – $Me(OH)_2$ or insoluble cyanic complexes with Fe – $Me_2Fe(CN)_6$. Treated slurry is discharged into the TMF, and after settling, water is recirculated in the process. The seepage from the TMF are collected in the secondary dam sump and is recirculated in the decant pond. As per the water flow described in the Project, on this route, there are no metal-loaded waters discharged into the environment, during normal operation stage. Under abnormal operation conditions, when the storage capacity designed for the pond is exceeded, (>2 PMP successive) and if the natural dilution taking place in such extreme situation – does not provide the quality conditions requested by NTPA 001, the project provides a treatment plant for low cyanide content waters where precipitation of metals will be performed. In conclusion, the Roşia Montană project provides realistic technical solutions to avoid metal pollution risks. We mention that the Government Decision no. 349/2005 regarding waste storage (“GD 349/2005”), by which the Directive no. 31/1999 regarding waste storage was enacted, **is not applicable to the Roşia Montană Project**. As regards the financial guarantee for the tailings management facility, the related frame regulation is the Directive

		no. 2006/21/EC on the management of waste from the extraction industries, which in the wording of art. 2 (4) expressly indicates the fact that waste resulting from the extraction industry and brought under regulation by the Directive no. 21/2006 are not under the incidence of the regulations of the Directive no. 31/1999, therefore they are not subject to the GD 349/2005. The estimation of the financial guarantee related to the tailings management facility will be performed after the transposition of the Directive 21 to the national legislationand according to the provisions of the normative transposition act. At the same time, apart from the comments above, please consider the fact that the financial guarantee for the environment rehabilitation is provided by (i) the Mining Law no. 85/2003 ("Law no. 85/2003"), (ii) the enactment Norms of Law no. 85/2003 and by (iii) Order no. 58/2004 for the approval of the technical Directives regarding the enactment and compliance with the rules indicated by the conformity program, the environment rehabilitation plan and the technical project, as well as for bringing under regulation the method for operating with the financial guarantee for the restoration of the environment affected by the mining activities ("Order no. 58/2004"). Pursuant to the normative acts mentioned above, the financial guarantee for the environment rehabilitation is annual and final. *(i) The annual financial guarantee for the environment rehabilitation* According to art. 131 of the Norms for the enactment of Law no. 85/2003 "*the financial guarantee for the environment rehabilitation, as related to the exploitation licence, is established annually, during the first month of the related period, and is provided in the licence, so as to cover the environment rehabilitation works mentioned in the environment rehabilitation plan and in the technical project".* According to art. 133 (1) of the Norms for the enactment of Law no. 85/2003, the financial guarantee for the environment rehabilitation cannot be lesser than the value of the environment rehabilitation works for the respective year, thus the guarantee will cover the rehabilitation works in case the licence titleholder ceases the mining activity and does not perform the rehabilitation works. *(ii) The final financial guarantee for the environment rehabilitation* According to the provisions of art. 15 of Order no. 58/2004, the final financial guarantee for the environment rehabilitation is established annually and is calculated as a quota of the environment rehabilitation works value, according to the monitoring program of the environment post-closing elements, which is included in the technical dismantling program.
082	In relation to surface mining, changes expected in the wells of the surrounding area have not been	Groundwater is not a significant component of the Rosia Montana hydrological system, as documented in the Hydrogeology Baseline Report (Volume 2) and Section 2.3 of Chapter 4.1 of the EIA (Volume 11). Where groundwater is present (including in the existing mine galleries) it is generally a shallow extension of the surface

	analyzed; the level of ground waters is likely to fall; this condition should be modelled.	water regime, with comparable quality (Exhibits 4.1.10 and 4.1.11). Because of the non-continuous shallow groundwater system, there are no changes expected in any of the few surrounding wells as a result of mining carried out by the project. Even if there were a larger number of wells, the discontinuities in the system would not be conducive to modelling. Subsurface water levels have already fallen to around 714 m ASL as a result of historic mining activities at Rosia Montana, where the construction of extensive galleries has drained any groundwater present. The primary receiving streams for unimpacted water will be the Roşia Stream and Corna Stream. The North and South Storm Water Diversions at the TMF will both discharge into Corna Valley immediately downstream of the Secondary Containment System. The Northern Roşia Valley Diversion Channel extending from the northern flank of the valley will discharge into Roşia Stream immediately downstream of the Cetate Water Catchment Dam and Pond. The diversion channels will be constructed during the construction phase to minimise the volume of clean surface water entering disturbed areas of the site. These diversion channels will be intended to convey water that is not impacted by historical or proposed mining activities. The diversions will reduce the volume of clean water and storm water mixing with possibly site-impacted waters requiring treatment in the mine area, thus reducing the overall treatment requirements and helping to provide for the biological baseflows in downstream streams. An additional objective of the diversions includes protecting structures, stockpiles and active areas from flood flows. Impacts to surface water flows will occur due to direct interception and containment of contaminated and uncontaminated surface water flows by structures constructed during the implementation of the Project. These structures include the Cetate Water Catchment Dam and the mine pits, with their associated diversion channels in the Roşia Valley; and the TMF and SCD with their associated diversion channels in the Corna Valley. Further drainage will be diverted from waste rock dumps in both valleys, from the old mine wastes and low grade ore stockpile and the 714 adit in the Roşia Valley from the operations area. The net result will be the potential to impact the flows in the Roşia and Corna streams and therefore also the Abrud and ultimately the Aries rivers. Wherever possible, clean water will be diverted around the facilities to the respective catchments downstream of the Project area, without loss of flow – and so any residual impact on surface water flows in the downstream system will be mainly in respect of loss of contaminated water only. The Project intercepts contaminated water from the Roşia and Corna catchments while diverting as much clean surface water as possible for return to the streams. Nevertheless, some of the treated water from the ARD waste water treatment plant is discharged back to the streams as compensation flow. This amount averages 237.42 m3/hr (66 L/s) over the operational life of the mine (Exhibit 4.1.12, stream 35 of the EIA). This is less than the

		average baseline flows which total 309.3 m3/hr (85.9 L/s), although it does not include diverted clean water flows. The apparent reduction in flow in the two streams (71.9 m3/hr, 20 L/s) is accounted for almost exactly by the intercepted mine water flows which together total 67.3m3/hr (18.7 L/s) – so the 23% (maximum) reduction in flow is offset by the removal of the most contaminated component. The impact on the River Abrud of the 71.9 m3/hr (20 l/s) reduction is negligible – about 1.4% of its total average flow. Moreover, the Project is committed to maintaining minimum flows in the Roşia and Corna streams of 72m3/hr (20 L/s) and 25.2 m3/hr (7 L/s) respectively. These are the estimated biological compensation baseflows which will be conducive to ecological sustainability when the streams have recovered sufficiently in quality terms to support aquatic fauna and flora. In the case of the Roşia stream lower flows than this minimum flow have already been recorded (see baseline data between 2000 and 2005).
083	The compilation also uses materials already included, in a moderately revised form. It contains descriptions related to the design, construction and operation of TMFs but less verifiable data.	The Tailings Facility Management Plan - TMFP - is a comprehensive plan that Roşia Montană Gold Corporation (RMGC) will implement in order to minimise the risks associated with the operation of the Roşia Montană Project Tailings Management Facility (TMF), in conjunction with ore processing operations. The *Tailings Facility Management Plan* conforms to applicable international and Romanian standards for the operation of such facilities. It provides general information on the geological and geotechnical setting of the TMF; describes its overall design, operation, monitoring, and closure aspects; and addresses the specific measures RMGC will employ to manage the facility in a safe and environmentally conscientious manner over the life of the mining operation. This management plan applies only to Roşia Montană Project activities. The Plan will be subject to annual review and update in response to internal and external reviewer comments, regulatory changes, changes in mining operations, stakeholder communications, internal performance verification and management review results, and other factors. Implementation of the *Tailings Facility Management Plan* will also be supported by a suite of standard operating procedures. These procedures will be compiled in the *RMGC Standard Operating Procedures Manual*, the development, review, approval, distribution, and update of which is controlled by the *Roşia Montană Project Environmental and Social Management Plan* .
084	An accurate geological - geotechnical cross-section is not available in relation to the area of the TMF.	All locations for facilities have been tested with the appropriate level of core drilling, geophysical surveying, and test pitting, with rock core samples collected as well as soil samples for geotechnical test work. All of this is work is covered under the feasibility and engineering study and the results are used for the design of the facilities. The results of this were used for the EIA, but not all the details for all drill holes, test pits, surveys and test work are reported in the EIA, as this is outside the scope of the EIA. In total, 221 geotechnical drill holes have been completed, for 9357.42 metres of core, and 172 test pits have been created. In addition, 886 other drill holes have

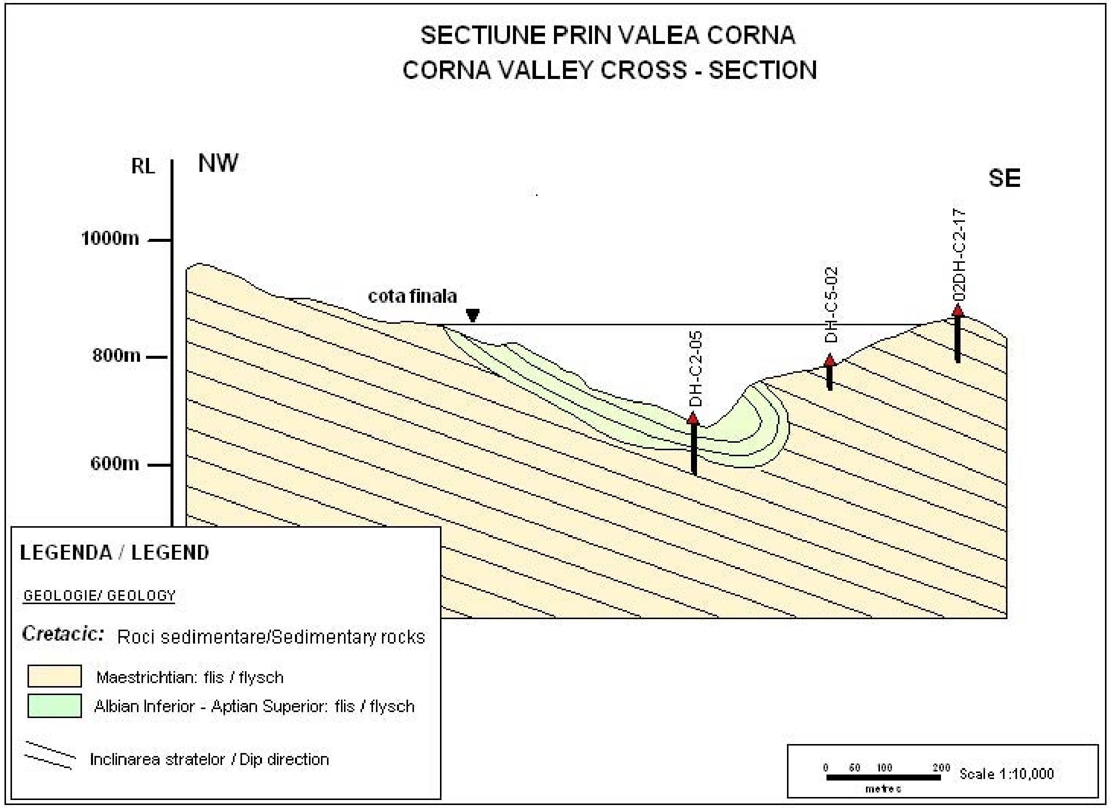
		been drilled, for 127,195.74 metres, to test the various aspects of the project, including geotechnical aspects and data, and approximately 70,000m of underground workings have also been geotechnically logged and tested. The details of this work are included in the feasibility study. In regards to the Corna Valley area, 72 drill holes for 3064.84m were completed and used for the appropriate test work as well as test pits and geophysical and geological surveys. Chapter 4.5 of the Assesment Study of the EIA presents in detail the geology of the area, including drawings of the regional and local geology. For the tailing pond, cross sections of the tailing pond are presented in the Annexes at Technological Processes: Figure: 2.19 – Scheme of the tailing pond system and Figure 2.20 – Transversal cross section of the tailing pond dam and of the retention secondary dam. In the management plan of the tailing pond, Figure 5.2 presents the geological profile along the tailing pond. Drawings 03A; 03B; 07A; 07B and 09 show cross sections of the main and secondary tailing pond. Data from the geotechnical study is described in section 2.3 (page 28) within the same plan. All the plans and cross sections present the faults, geological structure and geotechnical conditions. Please see the geological profiles of Corna Valley that are attached to this answer. In the geological profiles of the tailing pond projected for Corna Valley, there are no known faults that could endanger the safety of the pond.

		
085	It must be substantively certified that the soil may be appropriately solidified up to reaching a water seal; justification is required as to why the implementation of technical protection is unnecessary in the area of the TMF. It is not sufficient to analyze seismic hazards for 17	The TMF basin will be protected using a natural and engineered liner. The liner will be engineered and constructed to a thickness of 30 cm. The majority of the basin is covered with a relatively thick layer of colluvial clays and silts. This material has been sampled and tested to confirm it can achieve a re-compacted permeability specification of 1E-06 cm/sec. Therefore, the upper 30 cm of this layer will be moisture conditioned and re-compacted to achieve this design specification. In areas where there is insufficient material to compact a 30 cm layer, additional material will be borrowed from other parts of the basin to achieve this thickness. Where rock is exposed in near vertical faces, the rock will be removed (ripped or blasted) to achieve a slope where either colluvial material can be placed and compacted or where a geo-synthetic clay liner (GCL) could be placed. The GCL is a manufactured bentonite

	years; the TMF will remain in place following the closing of the mine.	clay layer material that can generally meet a permeability specification limit of 1E-07 cm/sec or less. In addition, the seismic hazards were evaluated for a period greater than 17 years. The design has been based on the Maximum Credible Earthquake (MCE). This is the largest earthquake that can be envisoned for the site based on both a deterministic evaluation and probabilistic evaluation for the entire earthquake history for the site (over 30 years). After the operating life of the TMF, the decant pond will be removed, pore water will drain from the tailings, and the tailings will consolidate. This significantly improves the stability of the facility with time and reduces the risk if failure after closure.
086	No reserve storage capacity is planned in addition to the storage capacity planned in the Corna valley which would enable the diversion of continuously incoming tailings quantities in the event of a breakdown or emergency (e.g. precipitation of an intensity and/or duration significantly exceeding the average value which could fill up the tailings storage capacity). The omission of the above from planning should be justified and supplemented.	The reserve storage capacity is built into the TMF design. The TMF will at all times have capacity for two Probable Maximum Flood (PMF) volumes. The Probable Maximum Precipitation (PMP) generates a PMF volume. The Romanian guidelines dictate the TMF must store a storm event over a 24-hour period having a magnitude that is expected to occur only once every 10,000 years. Such an event corresponds to 211 mm of rainfall in Rosia Montana. The PMP is over twice this magnitude, whether it corresponds to an event of 450 mm for summer or 440 mm for winter (combined with snowmelt). The PMF flood volume assumes that all of the diversion channels will fail and that the entire drainage basin will report to the TMF. The facility has been sized to have sufficient storage for two PMF volumes at all times during the operational life of the mine. The facility will also have a spillway in the left abutment as an additional contingency measure. If the abnormal operation were of sufficient magnitude, the processing plant would be shut down until normal operating conditions were achieved. However, if a PMF event occurred sufficient volume would be present that operations could continue un-abated. In all likelihood the occurrence of a PMF event would so de-habilitate the supporting infrastructure in the area that production may be interrupted due to a regional loss of roads, water supply and power systems. Backup power supply (on-site by generators) likely would not be affected by a PMF.
087	No subsurface water emergency storage capacity, with adequate volume, is planned for the event of a dam suffering a fault (caused by overflow, earthquake or other stability related problem). The planning and construction of a subsurface water emergency storage capacity, with adequate volume, is extremely important with regard to establishing environmental safety, for this could prevent the spread of hazardous industrial waste water leaving the tailings storage facility in the event of a possible dam burst.	The TMF will at all times have storage capacity for two Probable Maximum Flood (PMF) volumes. The Probable Maximum Precipitation (PMP) event generates one PMF volume. The Romanian guidelines dictate the TMF must store a storm event over a 24-hour period of a magnitude that is expected to occur only once every 10,000 years. Also, the design of the TMF has been based on the Maximum Credible Earthquake (MCE) events criteria. This is the largest earthquake that can be envisioned for the site based on both a deterministic evaluation and probabilistic evaluation for the entire earthquake history for the site (over 30 years). The subsurface storage capacity in the current plan is designed to collect seepage from the TMF behind the Secondary Containment Dam (SCD). If impacted water is documented in this sump the TMF operating plan is to collect and return this liquid back to the TMF and there is extra storage capacity behind the SCD. The volumes of seepage have been modeled and the size of the sump box and the pump back capability will be properly engineered to collect and direct any seepage that enters the Seepage Collection System (SCS). The Seepage Collection System (SCS) is not for emergency storage capacity purposes. In addition to the SCD and associated pump back system, a series of groundwater monitoring wells will be installed downstream of the SCD. These wells will be used to provide early detection of any potential leakage from the SCD

		and/or the TMF. In the unlikely event of leakage, these wells could be converted to dewatering wells to extract groundwater from the Corna valley and pump it back to the reclaim pond or directly to the processing plant.
088	Data relating to the specific density of the tailings is hypothetical; different values are listed in the table, in disregard of the recommendations and requirements of the Dangerous Substances Directive 76/464/EC.	The tailings density presented in the Waste Management Plan (Plan B) are not hypothetical but are based on the results of process technology tests carried out by specialised companies (Ausenco) and the properties of the ore. The number of 2.5 - 2.7 g/cm³ refers to the solids in the tailings. It can be (and has been) determined easily and precisely. The Directive 76/464/EC is not related to the density of the tailings, but to the pollution of the aquatic environment due to dangerous substances. This Directive contains stipulations which are relevant to the Rosia Montana Project, such as: • discharge of List I and II substances is subject to a permit defining emission standards (based on toxicity, bioavailability, persistence, etc.) • discharge of List I substances should be eliminated • discharge of List II substances should be reduced Cyanide is part of List II. An effluent concentration limit has been defined by the Romanian Government under the Standard NTPA 001-2002 (HG 351/2005). No deviation from the words and spirit of Directive 76/464/EC could be found in the evaluation of the Rosia Montana Project.
089	Only the pumping of tailings with 45% water content was examined; calculations related to alternatives with higher - safer - concentration are unavailable.	A filter pressed tailings option with up to 75% solids was evaluated. The result of this evaluation is described in Volume 16, Chapter 5 Assessment of the Alternatives, Section 3.3.3.16. The primary reasons for discarding this option were high operational cost and lack of operational experience and the resultant risk associated with this type of alternative. The technology has not been successfully applied at enough sites worldwide to provide confidence in the technology. The selected tailings solids content was optimized for the pumping and piping equipment while minimizing the water content.
090	The Corna Valley is situated in a fault zone which has not been adequately researched with regard to the long term stability of the dam, the characteristic condition of the soil and the water sealing capacity of the TMF's support.	All locations for facilities have been tested with the appropriate level of core drilling, geophysical surveying, and test pitting, with rock core samples collected as well as soil samples for geotechnical test work. All of this is work is covered under the feasibility and engineering study and the results are used for the design of the facilities. The results of this were used for the EIA, but not all the details for all drill holes, test pits, surveys and test work are reported in the EIA, as this is outside the scope of the EIA. In total, 221 geotechnical drill holes have been completed, for 9357.42 metres of core, and 172 test pits have been created. In addition, 886 other drill holes have been drilled, for 127,195.74 metres, to test the various aspects of the project, including geotechnical aspects and data, and approximately 70,000m of underground workings have also been geotechnically logged and tested. The details of this work are included in the feasibility study. In regards to the Corna Valley area, 72 drill holes for 3064.84m were completed and used for the appropriate test work as well as test pits and geophysical and geological surveys. For the Corna Valley no faults or structures are active and none have been for approximately 7 million years. All structures have been adequately tested as summarized above in regards to all geotechnical and

		structural aspects for the engineering study where all such information is available. Chapter 4.5 of the Assesment Study of the EIA presents in detail the geology of the area, including drawings of the regional and local geology. For the tailing pond, cross sections of the tailing pond are presented in the Annexes at Technological Processes: Figure: 2.19 – Scheme of the tailing pond system and Figure 2.20 – Transversal cross section of the tailing pond dam and of the retention secondary dam. In the management plan of the tailing pond, Figure 5.2 presents the geological profile along the tailing pond. Drawings 03A; 03B; 07A; 07B and 09 show cross sections of the main and secondary tailing pond. Data from the geotechnical study is described in section 2.3 (page 28) within the same plan. All the plans and cross sections present the faults, geological structure and geotechnical conditions. Please see the geological profiles of Corna Valley that are attached to this answer. In the geological profiles of the tailing pond projected for Corna Valley, there are no known faults that could endanger the safety of the pond.

		
091	The construction of a multifunctional dam warrants that the clay core of the dam is made of water-proof material, it does not swell or slide and pressure does not cause any changes. Considering the extreme height of the dam and the quantity	As stated in Chapter 2, Technological Processes, Section 3.1.5.5 and in the Tailings Facility Management Plan, Plan F, Section 1.4, the starter dam involves a central low permeability core with filter/transition zones, bentonite slurry wall and upstream and downstream rockfill zones. The TMF main dam, Corna Dam, will be raised in stages using mine waste materials in accordance with the design criteria. The use of mine waste materials dictates a certain design approach for raising the tailings during operations. The optimum use of mine waste materials, in conjunction with stability and ground water protection considerations results in selection of the centre-line method of construction and a pervious dam design above the starter dam. The use of waste rock to construct the dam lifts

	of stored material, stability must be evidenced with at least a model experiment and calculations. The study does not reflect recommendations defined by ICOLD (International Commission of Large Dams).	beyond the starter dam serves two purposes. First, it allows beneficial storage of waste rock with creating new waste rock stockpile footprints. Second it provides a structural material for constructing the TMF dam with expanding existing borrow areas or creating a need for new borrow areas. Details of the stability model are presented in Chapter 2, Technological Processes, Section 3.1.5.6. As part of the design process specific samples of the material that will be used for the clay core of the starter dam were obtained and tested. Tests included Atterberg Limits testing, moisture content tests, re-compacted permeability tests and triaxial compression tests. Based on these test results, a variety of stability analyses were conducted for the starter dam and for the final filling configuration to ensure that there was an adequate Factor of Safety (FOS) against both circular and sliding block failure modes.
092	It is unclear which model was used for modeling the stability of the dam; baseline data is unavailable.	The dam stability modeling is summarized in Section 4.4 of the Tailings Facility Management Plan (Volume 25, Plan F of the EIA). This section summarizes the cases and results for the dam stability modeling. The Slope/W Version 5.1 software package was used. The stability model Analyzed both circular and sliding block failure modes utilizing the utilizing the Spencer limit equilibrium method was used in the calculations. The Spencer method satisfies both moment and force equilibrium.
093	It is necessary to supplement the plan relating to the maintenance and monitoring of the dam?	The Tailings Facility and Management Plan, Plan F includes specific details regarding the maintenance and monitoring of the TMF dam. This information is specifically presented in Table 6.1, Role and Responsibilities of the TMF Operations, Maintenance, and Monitoring Staff, and Section 6.2 TMF Monitoring Systems and Actions. We would require additional guidance as to what information is thought to be missing or needs to be included in the EIA detailed Management Plan. It should also be noted that once dam construction is complete, a final detailed operation and maintenance manual (O&M) will be produced for the TMF that will account for the final design and as-built conditions.
094	It is necessary to examine whether spills may nevertheless occur, possibly causing a fault in the dam, in the event of a critical precipitation load, possibly involving the breakthrough of "external waters" contained by the curtain drains (for the reason that the curtain drains are not sized to drain the maximum possible amount of precipitation).	This has been evaluated and modeled. Based on the evaluation, the TMF is designed to always have the capacity for two Probable Maximum Flood (PMF) volumes. The Probable Maximum Precipitation (PMP) generates a PMF volume. The Romanian guidelines dictate the TMF must store a storm event over a 24-hour period having a magnitude that is expected to occur only once every 10,000 years. This corresponds to 211 mm of rainfall in Rosia Montana. The PMP is over twice this magnitude, whether it corresponds to an event of 450 mm for summer or 440 mm for winter (combined with snowmelt). The PMF flood volume assumes that all of the diversion channels will fail and that the entire drainage basin will report to the TMF. The facility will also have a spillway in the left abutment as an additional contingency measure. If the abnormal operation were of sufficient magnitude, the processing plant would be shut down until normal operating conditions were achieved. In addition to the surface storage capacity of the dam (as described above – storage of 2 PMF volumes at all times), the design also includes a drainage blanket beneath the downstream slope of the dam. These drains are intended to collect and route any seepage that occurs through the low permeability core material and allow the flow rate and chemical characteristics of the seepage liquid to be measured.
095	Is the volume of the second storage	The secondary containment dam will be located downstream of the main dam and has been designed to collect

	facility sufficient to withhold water possibly leaving the spillway? No subsurface water related tests were conducted in the surroundings of the TMF.	and contain the seepage from the TMF. The system is designed to contain the 100-year, 24-hour storm event. Only in the event of multiple storms exceeding two PMF would water leave via the TMF spillway. It is likely that at this point that the SCD would be full and discharging. Therefore, a discharge would occur in order to protect the TMF embankment. It should be considered, however, that such discharges during such extreme precipitation events would be highly diluted. For events larger than a 100-year; 24-hour event but less than a two PMF event would result in a discharge over the SCD spillway. However, the condition has been modelled and indicates that the water quality discharging from the SCD spillway would meet Romanian water quality discharge standards. Discharges are modelled in Volume 18, Chapter 7, Risk Cases, are dry weather release scenarios and, therefore, a worst case. Concentrations related to multiple PMF events would be much lower that the scenarios presented in the “Risk Cases”. A large amount subsurface water testing has been conducted in the area of and near the TMF. This includes both water quality testing and hydraulic testing. The results of this testing is summarized in the Water Baseline Report (Volume 1) and the Hydrogeology Baseline Report (Volume 2).
096	The specification of the planned dam's height is essentially important for the assessment of the risks of expected environmental impacts! From the point of view of risks, it is not irrelevant whether the dam is 185 or 200 m high (nearly 10% variation). Unfortunately the various volumes indicate different values.	As presented in Chapter 2, Technological Processes and the Tailings Facility Management Plan, Plan F, of the EIA, dam raises above the starter dam will be constructed up to 185 m. The 200 m height is incorrect. The location of the proposed TMF meets all criteria from a geotechnical-operational and design perspective in accordance with industry and dam design practices. Obvious concerns due to the location relate to the immediate down-gradient community, but the EIA has addressed concerns related to a dam failure due to an extreme climatic event by increasing the dam height to its current elevation in order to provide sufficient storage capacity for back to back probable maximum precipitation (PMP) events according to modelling results. This extra capacity does increase the dam height from the original proposed design however the increased height also reduces the risk to down-gradient communities.
097	The cyanide management plan exclusively contains general descriptions regarding the transport and use of cyanide. (We analyzed above risks related to the management of cyanide.)	The descriptions of the transport and use of cyanide are appropriate for this stage of the project. Specific details will be developed once the project is approved and contracts with suppliers are in place. The processes in which the cyanide is used are described in Volume 8, Chapter 2 Technological Processes, notably Section 4.1.2.2.
098	According to the documentation, the decision is pending as to the transport route which we judge to be a major factor due to the estimated risks.	The EIA Study Report describes the options that are available for the transport of sodium cyanide, in the form of containerized solid briquettes, from the manufacturer to the site. As noted in Chapter 4 of the EIA Study Report, RMGC has committed to using the safest route and they recognize that they must take into account factors that will change through time, such as weather, road conditions, traffic hazards, route availability, etc… It is therefore not appropriate to select only one route option. It is also stressed that transport will be carried out under the terms of the International Cyanide Code to which both the cyanide supplier and RMGC are signatories. This not only requires adherence to measures that assure safe supply, transport and use of this reagent, but also requires independent audit to ensure that safety measures (including the selection of the safest routes on every occasion) are adhered to.

		A final preferred cyanide transportation route will not be selected until closer to the date that cyanide will be transported, as the regional routes and infrastructure are in a constant state of change and we want the best route. A detailed route survey to identify all potential transportation alternatives and hazards, together with needed mitigation measures, will be completed before operations begin in consultation with administration and road traffic authorities. The survey will be conducted as close to the beginning of operations as possible to take advantage of the most updated rail and highway network improvements, as per EU guidelines, and always observing the route utilization norms, restrictions and recommendations imposed by the road administrator, traffic police and other public authorities as required by Romanian applicable laws. RMGC is committed to meeting all requirements to ensure safe transportation of any hazardous materials. Our company and our suppliers will adhere to the guidelines of the Cyanides Sector Group of the EU (CEFIC) for storage, handling and distribution of alkali cyanides. CEFIC sets the standards and requires compliance with EU Directives regulating the transport of thousands of different hazardous substances shipped daily throughout the EU. RMGC is also a signatory of the International Cyanide Management Code (ICMI), an internationally recognized practice for cyanide management in the gold mining industry; we will also require our suppliers to sign and abide by ICMI, and Roşia Montană plant operations will be ICMI certified. An ongoing, rigorous and independent audit of the cyanide management system will be followed as well.
099	In the course of applying the CIL technology, the manually controlled dosage of the cyanide solution is problematic; this procedure is not in conformity with BAT. We consider that in the INCO procedure the impact of winter cold weather on the applied HPD plastic pipes - running on the surface unprotected - was disregarded.	The dosage of cyanide will be carried out automatically involving no manual dosage as described in Chapter 2, pages 69 and 143 reproduced below: Page 69: Cyanide will be delivered in solid state, in specially designed and built ISO containers. Cyanide will be dissolved directly in the transport containers, in an alkaline solution coming from and recirculated in a mixing tank. The mixing tank is so designed to take over the whole capacity of a container used for transport. After the complete dissolution of the container content, the cyanide solution will be transferred from the mixing tank into a high capacity storage tank. Page 143: A modern electronic system will be implemented to ensure control of most phases of technological process, for its management, for collection of data and command of turning off and on sequences. This solution is in accordance with provisions of chapter 4.3.2.2.1 of BAT – UE Guideline Document on BAT for Management in Mining Activities dated March 2004, where usage “automatic control of cyanide” is provided as a method for reduction of cyanide consumption. The design of the tailings pipeline involves the provision of suitable containment as described in the following paragraph: Page 160: Detoxified tailings from the processing plant will be pumped from the tailings pump box, located at the processing plant to several discharge points at the TMF. The 5.2 km long pipeline will be 800-900 mm in diameter and will generally follow the mine roads leading to the TMF. Suitable containment will be provided to control any occurrences of spillage. The solids content of the tailings will be approximately 49%.

100	There is no plan for introducing any environmental quality assurance system, related to the operation and monitoring of the system, which would significantly improve operating safety conditions.	RMGC has developed the Roşia Montană Project Environmental and Social Management Plan (RMP ESMS) which addresses implicitly the quality assurance of the project including monitoring and operational safety. The RMP ESMS documents the requirements of a comprehensive Environmental and Social Management System for the Roşia Montană Project. The Roşia Montană Project Environmental and Social Management Plan applies to the full scope of the exploration, mining, metals recovery, rehabilitation, and closure activities that will be conducted by Roşia Montană Gold Corporation (RMGC) at the Roşia Montană Project site. It is considered current European Union and World Bank Group – International Finance Corporation guidelines; the “Equator Principles” (see http://www/equator-principles.com/principles.shtml), ISO 14001 (ISO 14001:2004, Environmental management systems – Requirements with Guidance for Use; International Organisation for Standardisation, Geneva, Switzerland, 2004),and appropriate elements of other internationally recognized standards and best management practices form the basis for management system development and implementation. The Roşia Montană Project Environmental and Social Management Plan is organized around five primary areas of management emphasis, which comprise a closed-loop management system model based on continual improvement concepts. The system includes several layers of feedback mechanisms designed to stimulate environmental, social, and economic improvements, while minimizing associated risks and liabilities, maintaining compliance with applicable laws and regulations, and fulfilling a proactive commitment to the prevention of pollution, the management and mitigation of environmental and social impacts, and strong policies for public engagement and communication. The continual improvement concepts together with the closed-loop management system will ensure that plans are regularly improved so that the performance of RMGC will meet best practice.
101	The BREF (best reference document) on the management of mining tailings describes 3 European mines operating with cyanide technology. Of the above, 2 mines produce a WAD cyanide concentration of less than 2 ppm in the tailings management facility, this being the result of the best available technique (BAT) in Europe. The impact study targets "compliance with EU standards", but plans a WAD cyanide concentration of less than 10 ppm in the tailing storage facility, notwithstanding the fact that this is	The technology applied by the project is BAT for cyanide reduction in tailings discharges as described in Volume 8, Chapter 2 – Technological Processes, Sections 2.3.1 and 4.1.3.2. The technology is used successfully throughout the world. The selected process in the Inco SO_2/air process. Testing of this process with tailings from Rosia Montana ores indicates that effluents with less than 2 mg/L WAD Cyanide are certainly possible if not likely (see Tables 2-23 and 2-24 in the above referenced document). This coupled with natural cyanide degradation in the impoundment may result in relatively low concentrations in the TMF. However, for the EIA document potentially overstating the efficiency of the process was not considered prudent, considering actual operating verses laboratory conditions. What is known with a high level of certainty at this stage of the project is that the technology to be employed can achieve the EU 10 mg/L WAD cyanide discharge limit for discharges to the TMF and due to well documented natural attenuation and dilution, the concentration in the TMF will be lower. Attenuation and dilution should account for approximately 50 percent reduction in cyanide concentration in the TMF on an annual basis. In actual operation, it is likely that cyanide concentrations will be lower than those stated in the EIA.

	not an existing but a new facility. Pursuant to Directive 96/61/EC (IPPC), however, as of October 2007, the given facility may only operate by the application of the best available technique; the value below 10 ppm requires clarification which is currently below 2 ppm in accordance with the prevailing BAT. If access to the BAT is indeed the purpose of the investor, it must follow the currently evidenced best technique.	
102	The damage prevention plan primarily describes rules of procedure; measures to be applied in case of an assumed incident event, including the detection, notification and prevention processes.	There is no prevention plan with this name. We have to refer separately to the Emergency Preparedness and Spill Contingency Plan (EPSCP), to the Internal Emergency Plan (IEP) and to the External Emergency Plan (EEP). The name “Emergency Situations Plan” can be found in the Romanian legislation by those mentioned above. It is important to understand that there are some precise deadlines when these plans must be elaborated and handed in to the Competent Authorities (CA). Thus, the EPSCP has also been handed in, together with the EIA, for the permit issuance phase. The IEP must be handed in before the investment's implementation, and, after that, the CA experts will elaborate the EEP. These documents contain Standard Operational Procedures for detection, prevention and notification.
103	Standard Operational Procedures are prepared in certain cases; the referenced annexes provide information on the details thereof. Unfortunately, volume 28 does not have annexes. There is, however, reference to the fact that such SOPs will be later devised. Accordingly, the procedural methods described herein are not ascertainable, and no opinion may be issued on these, in their current condition.	The documentation set that was handed in to the Romanian Competent Authorities, according to the internal legislation, which is lined up to the international one, contains more volumes that are being referred to. It is true that some procedures must be presented when the operational facilities start being used. But all the procedures required for the environmental permitting phase the project is in are ready.
104	Additional information should be	Gabriel Resources Ltd. is a Canadian company listed on the Toronto Stock Exchange. Its management team has

provided in relation to the RMGC (court of registration data, shareholders, capital composition, and listing, banks providing the funds, information relating to operation and professional activity until now).

60 years of experience permitting and operating seven mines on four continents. Gabriel Resources has adopted a corporate structure similar to all other Canadian-based resource companies operating worldwide.

RMGC was incorporated under the name "Euro Gold Resources S.A." and changed its name to Rosia Montana Gold Corporation S.A. on February 2, 2000. The incorporation number is J/01/443 of November 30, 1999. The authorized capital consists of RON 14,994,377.97 divided into 10,485,579 shares with a nominal value of RON 1.43 each.

Shareholder	Number of Shares
Gabriel Resources (Jersey) Ltd.	8,388,462
Minvest S.A.	2,025,216
Cartel Bau S.A.	23,967
Foricon S.A.	23,967
Comat Trading S.A.	23,967
Total:	10,485,597

All of the above information is publicly available on the Trade Register.

All funding, of RMGC's activities to date, has been provided by Gabriel from the Canadian capital markets. Future funding of RMGC will also be provided by the Canadian capital markets as well a syndicate of international commercial banks in compliance with the Equator Principles. The composition of the syndicate of banks has not yet been established. Details of the activities of RMGC, and in particular the development of the Rosia Montana project, are detailed in the EIA.

Gabriel Resources Ltd. is solely responsible for raising the capital necessary to complete this project and is fully capable of doing so. The estimated capital cost to complete the development of the Roşia Montana project -- including interest, financing, and corporate costs – is approximately US$ 750 million. The Company anticipates financing these costs with approximately 20% equity (US$ 150 million), and 80% debt, which could include senior and mezzanine or high yield debt. The Company has already raised the US$ 150 million equity component and is in final negotiations for the debt component. Subsequent to submission of the Environmental Impact Assessment Study (EIA,) technical experts representing several international private sector banks and export credit agencies have concluded that it complies with the Equator Principles designed to promote responsible lending by financial institutions to projects which raise environmental and social concerns.

105	The investor is responsible for presenting the appropriate financial guarantees for the costs of the mine are closing. The argument is unacceptable that such costs shall be allocated in the course of mining activity. The creation of a liability insurance system is not discussed either.	As a condition of beginning operations at Roşia Montană, an Environmental Financial Guarantee (“EFG”) is required, to ensure adequate funds are available from the mine operator for environmental cleanup. The Roşia Montană Gold Corporation (“RMGC”) has invested significant time, energy, and resources assessing the viability of a mining project in the valley of Roşia Montană. This assessment has led RMGC to conclude that Roşia Montană presents an attractive long-term development opportunity – an opinion confirmed by a variety of lending institutions, which have completed detailed reviews of the project’s design and profitability. We have every confidence that we will see the project through to the end of its projected 16-year lifespan, regardless of any fluctuations in the market price of gold. RMGC recognizes that mining, while permanently changing some surface topography, represents a temporary use of the land. Thus from the time the mine is constructed, continuing throughout its lifespan, closure-related activities – such as rehabilitating the land and water, and ensuring the safety and stability of the surrounding area – will be incorporated into our operating and closure plans. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive (“MWD”) and the Environmental Liability Directive (“ELD”). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. There are two separate and distinct EFGs under Romanian law. The first, which is updated annually, focuses on covering the projected reclamation costs associated with the

		operations of the mine in the following year. These costs are of no less than 1.5 percent per year, of total costs, reflective of annual work commitments. The second also updated annually, sets out the projected costs of the eventual closure of the Roşia Montană mine. The amount of the EFG to cover the final environmental rehabilitation is determined as an annual quota of the value of the environmental rehabilitation works provided within the monitoring program for the post-closure environmental elements. Such program is part of the Technical Program for Mine Closure, a document to be approved by the National Agency for Mineral Resources ("NAMR"). Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals. The current projected closure cost for Roşia Montană is US$76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US$ 76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine). The annual updates capture the following four variables: • Changes in the project that impact reclamation objectives; • Changes in Romania's legal framework, including the implementation of EU directives; • New technologies that improve the science and practice of reclamation; • Changes in prices for key goods and services associated with reclamation. Once these updates are completed, the new estimated closure costs will be incorporated into RMGC's financial statements and made available to the public. A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include: • Cash deposit; • Trust funds; • Letter of credit; • Surety bonds; • Insurance policy.

		Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roşia Montană project.
106	The presentation of similar financial guarantees is necessary in relation to monitoring in the period following the closing and the management of ARD waste water and escaped water (for a term of at least 30 years or indefinitely, as in many cases).	Long-term tasks are indeed an important cost factor for which sufficient financial means must be provided. They include: • Treatment of mine effluent in the Rosia valley according to current Romanian Water Legislation before discharge. • Treatment of dam seepage in the Corna valley according to current Romanian Water Legislation before discharge. • Treatment of pit water in case it needs treatment to prevent acidification • Maintenance of vegetation placed on cover systems on the tailings management facility (TMF), waste rock dumps, and revegetated production sites. • Monitoring of consolidation of the TMF. These tasks are described in more detail in Section 4.7 and summarized in Table 4-13 of the Mine Closure and Rehabilitation Plan (Plan J) which is part of the suite of EIA documents. There are two scenarios to discuss the financial securitization of the long-term meausures which must be considered independently: a) RMGC will operate as planned: In this case, which is by far the likeliest, the company fulfils long-term obligations such as water treatment, monitoring and some maintenance work which are paid for by the means generated from the regular operations and put aside in a fund during the operations phase. The fund will be available at closure. Depending on the details of the financial instruments, it may be administrated by an independent trust or in a similar way, so that the money is secured against squandering. Simply speaking, the fund will bear interest so that long-term tasks can be paid from this interest without using up the amount of money in the fund itself. Even if the long-term tasks will continue over many decades (which indeed may be the case and was estimated in the Mine Closure Plan, the principal amount will be enough to ensure that annual interest payment will be sufficient to pay for all tasks necessary. According to the Romanian Mining Legislation (Law 85/2003), Article 53 (1) and (2), the titleholder (here: RMGC) is obliged to carry out all the activities contained in the Mine Closure Plan, at its own cost and responsibility. Only if all requirements are satisfied, the titleholder is released from its obligations. b) RMGC cannot continue its operations as planned, which may be due to various reasons, however unlikely (e.g. adverse economic or political conditions, bancruptcy). Although very unlikely, this scenario must be taken into consideration, too. According to Article 20 (4) of the Mining Law and corresponding stipulations of the European Mine Waste Directive 2006/21/EC, the titleholder shall establish a financial guarantee for environmental rehabilitation (EFG, Environmental Financial Guarantee). Thus, there is no way for RMGC to escape or avoid the provision of EFG. Otherwise no license will be granted by the Competent Authority. The Environmental Financial Guarantee (EFG) will be structured in a way that ensures not only the immediate closure costs will be paid for without using taxpayer's money, but there are also enough funds to pay for the long-

		term tasks. The exact amount of the EFG will be determined in the near future when the details of the environmental permit become known. The same holds for the exact form of the EFG, i.e., as a cash deposit, letter of credit from a bank, of insurance solution, which are all common instruments for EFGs in international practice. Information regarding our closure plan, the cost of the program and our Environmental Financial Guarantee (“EFG”) are fully discussed in the Environmental Impact Assessment. The closure section can be found in Plan J of Vol. 29 and Plan L of Vol. 31, within the EIA. The EFG is discussed in the section of the EIA titled “Environmental and Social Management and System Plans” (Annex 1 of the subchapter titled “Mine Rehabilitation and Closure Management Plan”). With respect to the question about 30 years of monitoring, there will be no time limits on monitoring, and it will continue until the Roşia Montană Gold Corporation (“RMGC”) has been released from its environmental liability (a period which could exceed 30 years). Until being released from liability, RMGC will not receive its EFG from the Romanian Government, and the Government will retain control over the EFG account. Roşia Montană Gold Corporation (“RMGC”) recognizes that mining, while permanently changing some surface topography, represents a temporary use of the land. Thus from the time the mine is constructed, continuing throughout its lifespan, closure-related activities – such as rehabilitating the land and water, and ensuring the safety and stability of the surrounding area – will be incorporated into our operating and closure plans. In Romania, the creation of an Environmental Financial Guarantee (“EFG”) is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive (“MWD”) and the Environmental Liability Directive (“ELD”). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance.

There are two separate and distinct EFGs under Romanian law.

The first, which is updated annually, focuses on covering the projected reclamation costs associated with the operations of the mine in the following year. These costs are of no less than 1.5 percent per year, of total costs, reflective of annual work commitments.

The second also updated annually, sets out the projected costs of the eventual closure of the Roşia Montană mine. The amount of the EFG to cover the final environmental rehabilitation is determined as an annual quota of the value of the environmental rehabilitation works provided within the monitoring program for the post-closure environmental elements. Such program is part of the Technical Program for Mine Closure, a document to be approved by the National Agency for Mineral Resources (“NAMR”).

Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals.

The current projected closure cost for Roşia Montană is US $76 million, which is based on the mine operating for its full 16-year lifespan. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US $76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine.)

The annual updates capture the following four variables:

- Changes in the project that impact reclamation objectives;
- Changes in Romania’s legal framework, including the implementation of EU directives;
- New technologies that improve the science and practice of reclamation;
- Changes in prices for key goods and services associated with reclamation.

Once these updates are completed, the new estimated closure costs will be incorporated into RMGC’s financial statements and made available to the public.

A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include:

- Cash deposit;
- Trust funds;
- Letter of credit;

		• Surety bonds; • Insurance policy. Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roşia Montană project.
107	The long term management of acidic subterranean water is not resolved; semi-passive management is not efficient enough in extreme (cold) weather conditions. The contrary to the above should be evidenced with reference results.	There are two questions and/or assertions here: 1) There will be acidic water in the aquifers: The large facilities such as the TMF, the backfilled open pits and the mine waste dumps will not generate acidity, because (a) placement of the mine waste rock on the dumps and in the backfilled pits will follow an elaborate waste segregation strategy which allows to separate the potentially acid generating material from the non-acid generating material and encapsulate the first by the latter. This prevents effectively the generation of acid seepage. (b) The TMF contains processing wastes which would be prone to acidification if they are exposed to oxygen (air). However, during the production phase, they are saturated with pore water and overlain by a decant water pond. At closure, a cover will be placed whose primary design criterion was the effective limitation of oxygen ingress into the tailings. Moreover, alkaline fractions can be added to the cover material to provide some excess alkalinity which neutralizes any acidity in the tailings seepage. Sulphidic parts of the existing underground mine workings which generate acid mine drainage (AMD) today will have been removed during the production phase, so that the total surface of ARD-generating rock surfaces is much smaller than today. Nevertheless, some ARD will occur, which will be treated in the ARD treatment plant for a long time after closure (again: a lot more ARD would have to be treated if the RMP would not remove large parts of the ARD producing underground galleries). Being underground water, this water is today (and continues to) be in contact with local aquifers, fault zones etc., particularly in the Rosia valley. However, it will not leave the project area as contaminated acidic groundwater because it is captured behind the Cetate dam, using gaining stream conditions which effectively ensure that any contamination coming from upstream will eventually come to the surface downstream where it will be captured and pumped to the ARD treatment plant as long as necessary. 2) Semi-passive water treatment solutions are not enough to meet effluent standards, particularly during the cold season: The question rightly points to the fact that semi-passive treatment systems are better suited for some contaminants than for others, and that their performance may be sensitive to climatic conditions. It is therefore worth to analyse the treatment needs and technical possibilities in detail. After all, what counts is that the regulatory limits are guaranteed, not the technology which is used.

		The following contaminants are expected to need treatment (see, for example, Section 4.4 of the Mine Closure and Rehabilitation Plan): Corna valley: • Nitrogen compounds (CN, NH4, NO3) • Heavy metals (Mo) and metalloids (As) • Calcium and Sulphate (must be treated, too, because in the seepage in Corna valley they are above the NTPA 001/2002 limits); Rosia valley: • pH • Heavy metals (Fe, Mn, Cu, Zn,...) • Sulphate • Low pH is easily adjusted using either physical-chemical stages or microbial sulphate reduction. Physical-chemical treatment (e.g., dolomite drainage) is a proven standard technology. Microbial sulphate reduction raises the pH but shows a kinetics which is dependent on temperature (i.e., becomes slower at lower temperatures). However, it has the additional advantage that the sulphate concentration is also lowered. Depending on the exact process parameters, the NTPA-001 limits can be achieved. Some thermal insulation and/or heating may be required which adds to the cost. • For heavy metals, passive systems work properly, using a wide variety of physico-chemical and biological approaches. The physico-chemical components are largely independent of temperature, and may even work better at lower temperatures for some elements (due to solution/precipitation equilibria). Bio-adsorption is also largely insensitive to temperature. For heavy metals, roughly speaking, the size of the treatment ponds ("lagoons") matters. • For nitrate and ammonia, semi-passive systems are a proven technology, which show some dependency on temperature. However, with sufficient size of the ponds, even slow nitrification and denitrification kinetics of biological systems can be compensated to safely achieve the effluent standards. • For cyanide, biological solutions are in use, but it is not clear at the moment whether off-the-shelve technologies will achieve the current discharge standard. New biological technologies (highly efficient strains of CN degrading bacteria) have recently been developed and are currently tested by independent institutes for their suitability to achieve the required effluent standard of 0.1 mg/l CN_{tot}. They are expected to show some sensitivity to temperature (which will require thermal insulation and/or modest heating of a semi-passive reactor), but are an attractive alternative to conventional CN detoxification plants. • There is no semi-passive technology, to our knowledge, to treat Calcium. However, it is questionable that the current discharge standard of 300 mg/l for Calcium (which leads to the need to treat all effluents at RM

		for Calcium) will still be in place in 20 years time. No other regulatory framework is known to us where Calcium limits are set so low as in Romania, so that even lime precipitation which is BAT for mine water treatment, cannot be used. If, however, the discharge limit for Ca continues to be in place, it cannot be achieved with passive treatment systems as we know them today. • Sulphate can be removed in a microbial SO4-reducing semi-passive scheme (see above). This is standard technology, which, to provide defined conditions, often uses reactor-based systems with some heating and/or thermal insulation. Again, however, the question is whether the current discharge limit for SO4 will still be in place when the time comes for semi-passive treatment systems. The current regulatory limit of 600 mg/l in its generality is unique to Romania. Semi-passive systems are not regarded as the panacea for all water treatment problems. For some components, they are currently being developed or improved and it is likely that safe semi-passive solutions are available when they are needed. Some components (strictly regulated in Romania but non-toxic, for that matter) cannot be treated semi-passively, but it remains to be seen whether the current discharge limits will still be in place when semi-passive systems could replace the active treatment plant. In order to have working solutions available when the time comes, semi-passive (e.g., biological) treatment systems will be built and tested during the operation phase in both the Corna and Rosia Valleys. If they show satisfactory removal rates and compliance with regulatory requirements, they will be used for long-term water treatment, as long as necessary. If the performance of the semi-passive system will not be satisfactory, the conventional treatment plant will still be available as backup. In summary, the effluent standards and limits will be guaranteed at all times, and only if (semi-) passive systems can do the job safely, they will replace the active, conventional plant. If not, the effluent standards will still be met. The issue here is not that semi-passive systems will be used but that the discharge standards are guaranteed. If this is possible with semi-passive systems, they will be used, otherwise conventional treatment systems are there to stay as backup. Long-term post closure costs, which are dominated by expenses for water treatment, are a significant part of the overall closure and rehabilitation cost estimates. While many of RMGC's closure cost estimates are calculated relatively accurately, scientists can only formulate rough estimates concerning how long water treatment will need to continue. Drawing on the experience of our EIA experts, we have provided our best estimates in Section 4.7 of the Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). The streams which require treatment over the longest time periods are the tailings management facility (TMF) dam seepage and the water collected from the underground mine workings in the Cetate valley. Both time frames are estimated to be at least 50 years. The approach used in the EIA to estimate the time was conservative. It over-

		estimates the time needed for the ARD water to improve in quality and render it amenable to semi-passive treatment in the lagoons provided in the area downstream from the Cetate dam and eventually reach an acceptable quality so that it can be discharged into the environment without further treatment. Nevertheless, for the purpose of the EIA the conservative approach is retained, i.e., that further treatment is required. Despite the uncertainty surrounding the necessary duration, RMGC will set aside funds – currently, as the questioner notes, are estimated to US $1.25 million US per year – to cover these costs until the treatment is no longer necessary. RMGC's Roşia Montană Project will differ from previous mining practices that have abandoned mine sites without proper closure or rehabilitation. We will act in total compliance with Romanian Mining Legislation (Law 85/2003, Article 53 (1) and (2)) which requires RMGC to execute all activities listed in the Mine Closure and Rehabilitation Plan (Plan J in the EIA) at our expense.
108	The costs budgeted for the closing of the mine are unrealistically low (70 million USD - Volume 29, p. 130). No costs have been planned for monitoring and waste water cleaning for the term of operation.	RMGC's closure estimates, which were developed by a team of independent experts with international experience and will be reviewed by third party experts, are based on the assumption that the project can be completed according to the plan, without interruptions, bankruptcy or the like They are engineering calculations and estimates based on the current commitments of the closure plan and are summarized in the EIA's Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). Annex 1 of Plan J will be updated using a more detailed approach looking at every individual year and calculating the amount of surety, which must be set aside year by year to rehabilitate the mine before RMGC is released from all its legal obligations. Most importantly, the current estimates assume the application of international best practice, best available technology (BAT) and compliance with all Romanian and European Union laws and regulations. Closure and rehabilitation at Roşia Montană involves the following measures: • Covering and vegetating the waste dumps as far as they are not backfilled into the open pits; • Backfilling the open pits, except Cetate pit, which will be flooded to form a lake; • Covering and vegetating the tailings pond and its dam areas; • Dismantling of disused production facilities and revegetation of the cleaned-up areas; • Water treatment by semi-passive systems (with conventional treatment systems as backup) until all effluents have reached the discharge standards and need no further treatment; • Maintenance of the vegetation, erosion control, and monitoring of the entire site until it has been demonstrated by RMGC that all remediation targets have been sustainably reached. While the aspects of closure and rehabilitation are many, we are confident in our cost estimates because the largest expense—that incurred by the earthmoving operation required to reshape the landscape—can be estimated with confidence. Using the project design, we can measure the size of the areas that must be reshaped and resurfaced. Similarly, there is a body of scientific studies and experiments that enable scientists to determine

		the depth of soil cover for successful re-vegetation. By multiplying the size of the areas by the necessary depth of the topsoil by the unit rate (also derived from studying similar earthmoving operations at similar sites), we can estimate the potential costs of this major facet of the rehabilitation operation. The earthmoving operation, which will total approximately US $65 million, makes up 87% of closure and rehabilitation costs. Also, the necessity of additional technological measures to stabilize and reshape the tailings surface will be discussed in the update of the Economical Financial Guarantee (EFG) estimate, which leads to an increase the provisions for tailings rehabilitation, especially if the TMF is closed prematurely and no optimized tailings disposal regime is applied. The exact figures depend on the details of the TMF closure strategy which can be finally determined only during production. We believe that—far from being too low—our cost estimates are evidence of our high level of commitment to closure and rehabilitation. Just as a comparison, the world's largest gold producer has set aside US $683 million (as of December 31, 2006) for the rehabilitation of 27 operations, which equates to US $25 million on average per mine. The RMGC closure cost estimates, recently revised upward from the US $73 million reported in the EIA based on additional information, currently total US $76 million. Long-term post closure costs, which are dominated by expenses for water treatment, are a significant part of the overall closure and rehabilitation cost estimates. While many of RMGC's closure cost estimates are calculated relatively accurately, scientists can only formulate rough estimates concerning how long water treatment will need to continue. Drawing on the experience of our EIA experts, we have provided our best estimates in Section 4.7 of the Mine Closure and Rehabilitation Management Plan (Plan J in the EIA). The streams which require treatment over the longest time periods are the tailings management facility (TMF) dam seepage and the water collected from the underground mine workings in the Cetate valley. Both time frames are estimated to be at least 50 years. The approach used in the EIA to estimate the time was conservative. It over-estimates the time needed for the ARD water to improve in quality and render it amenable to semi-passive treatment in the lagoons provided in the area downstream from the Cetate dam and eventually reach an acceptable quality so that it can be discharged into the environment without further treatment. Nevertheless, for the purpose of the EIA the conservative approach is retained, i.e., that further treatment is required. Despite the uncertainty surrounding the necessary duration, RMGC will set aside funds – currently, are estimated to US $1.25 million US per year – to cover these costs until the treatment is no longer necessary. RMGC's Roşia Montană Project will differ from previous mining practices that have abandoned mine sites without proper closure or rehabilitation. We will act in total compliance with Romanian Mining Legislation (Law 85/2003, Article 53 (1) and (2)) which requires RMGC to execute all activities listed in the Mine Closure and Rehabilitation Plan (Plan J in the EIA) at our expense.

109	The study allows us to conclude that the operator is unable to assume liability in accordance with Directive 2004/35/EC.	The details of Roşia Montană Gold Corporation's ("RMGC") Environmental Financial Guarantee ("EFG")are discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). In Romania, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD"). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. RMGC has retained one of the world's leading insurance brokers, which is well established in Romania and has a long and distinguished record of performing risk assessments on mining operations. The broker will use the most appropriate property and machinery breakdown engineers to conduct risk analysis and loss prevention audit activities, during the construction and operations activity at Roşia Montană, to minimize hazards. The broker will then determine the appropriate coverage, and work with A-rated insurance companies to put that program in place on behalf of RMGC, for all periods of the project life from construction through operations and closure. RMGC is committed to maintaining the highest standards of occupational health and safety for its employees and service providers. Our utilization of Best Available Techniques helps us to ensure this goal is achieved. No organization gains from a loss, and to that end we will work to implement engineering solutions to risk, as they are far superior to insurance solutions to risk. Up to 75% of loss risk can be removed during the design and construction phase of a project. Yet we recognize that with a project as large as that being undertaken at Roşia Montană, there is a need to hold

		comprehensive insurance policies (such policies are also a prerequisite for securing financing from lending institutions). Core coverage includes property, liability, and special purpose (e.g. delayed start up, transportation, non-owned). Thus in the event of legitimate claims against the company, these claims will be paid out by our insurers. All insurers and insurance coverage related to the mining operations at Roşia Montană will be in full compliance with Romania's insurance regulations.
110	No financial guarantees are available for the long term operation of the TMF.	During the operating phase, operation of the TMF is funded out of the cashflow of the company. Closure and rehabilitation of the TMF will be covered by funds which are generated during the operating phase and put aside in appropriate financial instruments. According to Article 20 (4) of the Mining Law and corresponding stipulations of the European Mine Waste Directive 2006/21/EC, the titleholder shall establish a financial guarantee for environmental rehabilitation (EFG, Environmental Financial Guarantee). Thus, there is no way for RMGC to escape or avoid the provision of EFG. Otherwise no license will be granted by the Competent Authority. An Environmental Financial Guarantee will be in place to cover for environmental restoration according to the standards applied to the entire RMP, but taking third party cost into account. This ensures that the state can hire professional contractors to complete closure and rehabilitation works in the same way as RMGC would have done them, without taking refuge to any taxpayer's money. The exact amount of the EFG will be determined in the near future when the details of the environmental permit become known. The EFG will be in place before the operation permit is issued. The same holds for the exact form of the EFG, i.e., as a cash deposit, letter of credit from a bank, of insurance solution, which are all common instruments for EFGs in international practice. Representatives of Roşia Montană Gold Corporation have displayed their availability to discuss the issues related to the establishment and maintenance of a financial guarantee for environmental rehabilitation and they have not stated that locals of Abrud should obtain their own accident insurance policies. Details related to RMGC's Environmental Financial Guarantee ("EFG") are discussed in the Report on Environmental Impact Assessment, in the section of the titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). In Romania, the creation of an Environmental Financial Guarantee is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). There are also two directives issued by the European Union which include provisions related to the EFG: the Mine Waste Directive ("MWD", no. 2006/21/EC) and the Environmental Liability Directive ("ELD", no. 2006/21/EC).

		The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation instruments are enacted by the Romanian Government, we will be in full compliance. Moreover, we would also like to underline the fact that the internal legislation stipulates two types of environmental financial guarantees, namely the annual environmental financial guarantee ("Annual EFG") and the final environmental financial guarantee ("Final EFG"). The annual EFG is updated on an annual basis, and it is established in order to cover the reconstruction costs associated to mining activities that are to be developed during the following year. These costs are no less than 1.5% of the total costs resulting form the preliminary estimates on annual production. Final EGF is also updated on an annual basis and includes the estimated costs for a possible closure of Roşia Montană mine. The EFG quantum is established as an annual percentage of the value of the environmental rehabilitation works stipulated in the framework of the monitoring program established for the post-closure environmental factors. This program is a part of the Technical Mine Closure Program, a document which is going to be approved by the National Agency for Mineral Resources ("NAMR"). Both EFGs will be fully financed and made available to the Romanian authorities, and the amounts provided by these EFGs will not be impacted in case of RMGC bankruptcy The estimated cost for the closure of Roşia Montană mine is US$ 76 million. This estimate is based on the activity developed during its16 year life. Annual updates are going to be conducted by independent experts, in collaboration with NAMR as competent governmental authority in the field of mining activities. These updates are going to ensure the fact that in the unlikely case of a premature closure of the project, at any given moment, every EFG is going to reflect the costs associated with the rehabilitation. Annual updates consider the following four alternatives: • project amendments that impact the rehabilitation activities;

		• amendments of the Romanian legal framework, including the implementation of EU directives; • new technologies that improve the science and practice of the rehabilitation; • price amendments for key assets and services associated with the rehabilitation. Once these updates have been completed, the new estimates related to closure costs are going to be included in the RMGC's financial reports and will be publicly disclosed. Furthermore, we would like you to take notice that RMGC has retained one of the world's leading insurance brokers, which is well established in Romania and has a long and distinguished record of performing risk assessments on mining operations. The broker will use the most appropriate property and machinery breakdown engineers to conduct risk analysis and loss prevention audit activities, during the construction and operations activity at Roşia Montană, to minimize hazards. The broker will then determine the appropriate coverage, and work with A-rated insurance companies to put that program in place, on behalf of RMGC. RMGC is committed to maintaining the highest standards of occupational health and safety for its employees and service providers. Our utilization of Best Available Techniques helps us to ensure this goal is achieved. No organization gains from a loss, and to that end we will work to implement engineering solutions to risk, as they are far superior to insurance solutions to risk. Up to 75% of loss risk can be removed during the design and construction phase of a project. As your statement refers to two different issues, please take into consideration the following aspects: (i) insurance of the mining projects Directive no. 2004/35/CE regarding **on environmental liability with regard to the prevention and remedying of environmental damage**, which has been published in the Official Journal of the European Union no. L143/56 ("Directive no. 35/2004") establishes the general governing framework with regard to environmental pollution. According to the provisions stipulated by art. 1 of Directive no. 35/2004 "*The purpose of this Directive is to establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage*." Directive no. 35/2004 states as principle within the framework of the dispositions of art. 14 (1) the fact that "Member States shall take measures to encourage the development of financial security instruments and markets by the appropriate economic and financial operators, including financial mechanisms in case of insolvency, with the aim of enabling operators to use financial guarantees to cover their responsibilities under this Directive". Moreover, according to the provisions of art. 19 (1) Directive no. 35/2004, the Member States shall bring into force

		the laws, regulations and administrative provisions necessary to comply with this Directive by 30 April 2007. We would like to underline the fact that, up to now, the Directive no. 35/2004 hasn't been transposed into our legislation. Taking into account the previously mentioned aspects, we kindly ask you to take notice of the fact that, at this moment there are no internal legal regulations to establish the material and procedural aspects with regard to the establishment of such a guarantee. However, if specific legal provisions are going to be stipulated for the establishment of certain guarantees, RMGC is going to take all necessary measures to fulfill all relevant legal liabilities. (ii) the responsibility for the prejudices caused to the environment Independently of the aforementioned aspects, we would like to underline the fact that, the relevant legislation in the field punctually establishes the responsibilities of the titleholder with regard to the rehabilitation of the impacted environment. The titleholder is liable both during the development of mining operations and at the moment of cessation of mining activities. In this respect we would kindly ask you to take notice of the following mandatory legal provisions: (a) art. 3 (1) e of Government Emergency Ordinance no. 195/2005 regarding the environmental protection ("GEO no. 195/2005") establishing the "polluter pays" principle. (b) Art. 39 (1) p of Law no. 85/2003 the titleholder of the license is responsible "to carry out upon termination of the concession the works for care and maintenance/closure of the mine/quarry, as the case may be, including the Post Closure Monitoring Program, according to the activity cession plan". (c) Art. 37 (3) of Law no. 85/2003 "The titleholders, legal persons shall be liable for the improvement of all environment factors, affected by the mining activity, according to the environmental rehabilitation plans as approved by the Competent Authority". (d) Art. 37 (5) of Law no. 85/2003 "the titleholder of a license shall be further liable, in accordance with the rules which determine the civil extracontractual responsibility, for the damages caused to the third parties by its fault as a result of mining activities conducted prior to the date of termination of relinquishment, even if such damages are evidenced after the termination of concession or administration". The environmental financial guarantee is annual (ensures the development of environmental rehabilitation works undertaken by the titleholder through the design for environmental rehabilitation) and final (ensures the development of environmental rehabilitation works stipulated in the program for the cessation of mining operations).

111	According to the study, the possibility of revitalization could be established through surface mining activity based on the best available technique (BAT), "but the implementation thereof depends on the decision of the authorities". The message sent by the investor to the Romanian authorities seems to imply that the rehabilitation costs are not charged to the project budget.	There seems to exist a misunderstanding, or a misunderstandable formulation. What is meant is that the after-use scenarios are agreed with the authorities. Only then can the details of the closure and rehabilitation measures for the open pits (and other facilities) defined. For example, according to the Mine Waste Directive 2006/21/EC, rehabilitation means the treatment of the land affected by a waste facility in such a way as to restore the land to a satisfactory state, with particular regard to soil quality, wild life, natural habitats, freshwater systems, landscape and appropriate beneficial uses. This is exactly what RMGC intends to do. Consultation with the authorities on the preferred after use scenarios (and therefore closure and rehabilitation details) will start during the operating phase. The implementation of the closure program (which starts already in the early years of the operating period) is financed out of the company's revenues. Long-term tasks such as revegetation and water treatment will be financed by funds which will be put aside during the operating phase, too. The closure costs have been estimated in the Mine Rehabilitation and Closure Plan (Plan J).
112	There is no adequate financial security for emergencies. The EIA does not make any proposals regarding the prevention of the possible consequences of the most severe accident, the depositing of a financial basis serving the restoration of the original condition.	According to the Romanian legislation (Government. Decision no. 95/2003, transposition of the Seveso II Directive), all the sites that have the potential to produce a major industrial accident involving hazardous substances shall be insured, following a certain procedure. These aspects are currently in course of development and will comply with the schedule established by the competent authorities. The details of Roşia Montană Gold Corporation's ("RMGC") Environmental Financial Guarantee ("EFG") are discussed in the section of the Environmental Impact Assessment titled "Environmental and Social Management and System Plans" (Annex 1 of the subchapter titled "Mine Rehabilitation and Closure Management Plan"). In România, the creation of an EFG is required to ensure adequate funds are available from the mine operator for environmental cleanup. The EFG is governed by the Mining Law (no. 85/2003) and the National Agency for Mineral Resources instructions and Mining Law Enforcement Norms (no. 1208/2003). Two directives issued by the European Union also impact the EFG: the Mine Waste Directive ("MWD") and the Environmental Liability Directive ("ELD"). The Mine Waste Directive aims to ensure that coverage is available for 1) all the obligations connected to the permit granted for the disposal of waste material resulting from mining activities and 2) all of the costs related to the rehabilitation of the land affected by a waste facility. The Environmental Liability Directive regulates the remedies, and measures to be taken by the environmental authorities, in the event of environmental damage created by mining operations, with the goal of ensuring adequate financial resources are available from the operators for environmental cleanup efforts. While these directives have yet to be transposed by the Romanian Government, the deadlines for implementing their enforcement mechanisms are 30 April 2007 (ELD) and 1 May 2008 (MWD) – thus before operations are scheduled to begin at Roşia Montană. RMGC has already begun the process of complying with these directives, and once their implementation

		instruments are enacted by the Romanian Government, we will be in full compliance. RMGC has retained one of the world's leading insurance brokers, which is well established in România and has a long and distinguished record of performing risk assessments on mining operations. The broker will use the most appropriate property and machinery breakdown engineers to conduct risk analysis and loss prevention audit activities, during the construction and operations activity at Roşia Montană, to minimize hazards. The broker will then determine the appropriate coverage, and work with A-rated insurance companies to put that program in place on behalf of RMGC, for all periods of the project life from construction through operations and closure. RMGC is committed to maintaining the highest standards of occupational health and safety for its employees and service providers. Our utilization of Best Available Techniques helps us to ensure this goal is achieved. No organization gains from a loss, and to that end we will work to implement engineering solutions to risk, as they are far superior to insurance solutions to risk. Up to 75% of loss risk can be removed during the design and construction phase of a project. Yet we recognize that with a project as large as that being undertaken at Roşia Montană, there is a need to hold comprehensive insurance policies (such policies are also a prerequisite for securing financing from lending institutions). Core coverage includes property, liability, and special purpose (e.g. delayed start up, transportation, non-owned). Thus in the event of legitimate claims against the company, these claims will be paid out by our insurers. All insurers and insurance coverage related to the mining operations at Roşia Montană will be in full compliance with Romania's insurance regulations. Detailed financial guarantees are in place, in the form of the EFG, which require Roşia Montană Gold Corporation ("RMGC") to maintain adequate funds for environmental cleanup. The EFG is updated annually and will always reflect the costs associated with reclamation. The current projected closure cost for Roşia Montană is US $ 76 million, which is based on the mine operating for its full 16-year lifespan. The EFG must be in place to receive an operating permit to begin mining operations. An analysis is underway to determine the EFG required during each year of operation. The minimum amount at the start is expected to be approximately US $ 25 million and increase from that level annually. Each EFG will follow detailed guidelines generated by the World Bank and the International Council on Mining and Metals. The annual updates will be completed by independent experts, carried out in consultation with the NAMR, as the

		Governmental authority competent in mining activities field. These updates will ensure that in the unlikely event of early closure of the project, at any point in time, each EFG will always reflect the costs associated with reclamation. (These annual updates will result in an estimate that exceeds our current US$ 76 million costs of closure, because some reclamation activity is incorporated into the routine operations of the mine). A number of different financial instruments are available to ensure that RMGC is capable of covering all of the expected closure costs. These instruments, which will be held in protected accounts at the Romanian state disposal, include: • Cash deposit; • Trust funds; • Letter of credit; • Surety bonds; • Insurance policy. Under the terms of this guarantee, the Romanian government will have no financial liability in connection with the rehabilitation of the Roşia Montană project.
113	The study does not discuss the issue of the barrier layer related to the closing of the TMF. The question arises as to how this is resolved, the insulation used for protection against surface in wash, etc.	The Mine Rehabilitation and Closure Management Plan, Plan J, contains details as to the closure plan for the TMF. In summary, the tailings will be regraded and covered first with a 30-40 cm thick layer of clayey silt layer used as an oxygen barrier, then with an 80-140 cm layer of subsoil clayey silt. It will then be covered with 10 cm of topsoil for re-vegetation. The purpose of the cover system is as follows: 1) reduce any potential acid rock drainage from the tailings by limiting infiltration and oxygen ingress 2) control infiltration of precipitation by shedding surface water off the cover and directing it via engineered grading and ditching towards the final location of the TMF surface discharge point 3) reduce wind and water erosion 4) provide a growth medium upon which to establish vegetation 5) reduce the potential for direct contact between tailings and humans and wildlife Water runoff onto and off the cover system will be collected and discharged through engineer channels. During construction of the Rosia Montana project excess soil will be stockpiled near the upper end of the TMF to be used during closure as the final cover material
114	The condition of the environment will only deteriorate following the termination of mining activity if environmental rehabilitation required following its closing is not implement	Even though not a question, the statement of the questioner is correct. A comprehensive environmental rehabilitation program must be carried out, in order to leave the mine in a sustainable state. There are legal requirements both on the Romanian and EU level to implement a closure program. According to the Romanian Mining Legislation (Law 85/2003), Article 53 (1) and (2), the titleholder (here: RMGC) is obliged to carry out all the activities contained in the Mine Closure Plan, at its own cost and responsibility. Only if all requirements are satisfied, the titleholder is released from its obligations.

115	Biological diversity and the chapters on vegetation and the fauna contain few specifics; they do not reflect or falsely reflect the results of the basic studies. The increase in vehicle traffic, too, represents the greatest risk threatening natural values.	The baseline conditions report regarding the biodiversity component (vol. 13, chapter 4.6), as technical-administrative assessment instrument is not intended to be a scientific exhaustive study which diminishes to the minimum all the details and all the aspects related to biodiversity. On the other hand, Torsvik & coll. 1990, was emphasizing the fact that *"nobody has succeeded until now, not even on a local level, to perform a complete inventory of a habitat".* The presented study remains an instrument which is meant for the presentation of some aspects related to the natural environment so as to facilitate the decision making process, complying with the requirements of the specific legislation in the field. Nevertheless, during the immediately subsequent period, for the substantiation of the decisions regarding the details which will establish the design of the Compensatory Functional Ecological Network recommended in the Biodiversity Management Plan (vol. 27) starting with the year "0" of the project's implementation a complex procedure shall be elaborated, based on some pre-established inventory protocols of all groups bearing special bio-ecocenotic relevance. The fauna and flora inventories will be transposed in a computerized database system, which employs the GIS platform, interconnected with the biodiversity national database system at an unprecedented level for Romania. Moreover, among the inventoried species a set of key species will be selected, with a bio-indicative value, respectively of a high ecological relevance, which will constitute the object of a monitoring program opened to all the stakeholders, which will be integrated in the aforementioned database system. Thus the targets enforced by the standards of a safe operation will be reached, which will guarantee the real-time access to the entire set of relevant data for the monitoring of the environmental factors, by means of a transparent and objective process. In this respect, one may not bring into discussion an attempt to minimize or suppress aspects related to the generated impacts. As far as the traffic-generated impact is concerned, within the framework of the procedures (vol. 27), which enforce the reduction of the impact (bio-diversity management plan), protection curtains and ecological corridors are scheduled to be realized, having the primary specific function of reducing the aerosol pollution which will limit the transportation route. Moreover, for such transportation routes, within the framework of detail designing measures and for the accomplishment of the Compensatory Functional Ecological Network, ecoducts are scheduled to be realized in order to facilitate the migration of species between adjacent habitats separated by transportation routes. In this respect, the impact inducted by the transportation routes (in particular by the ones of technological transportation) is minimized.
116	According to chapter 9.5, there are no protected or endangered plant and animal species in the RMP area, whereas fully protected	In the English version of the Non-Technical Summary (Chapter 9.5, on page 46), it stated that "no endangered or protected plants or wildlife species were found in the RMP Area." However, in the Romanian version of the Non-Technical Summary (Chapter 9.5, on page 46) it says, "no rare species of flora and fauna on the perimeter of RMP" but the phrase is continuing "but there were identified such species in the impact area, mentioned in chapter

	species do in fact exist in the area, according to the so-called Habitat Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.	4.6.". It is clear that this is an oversight; however a detailed investigation of the baseline report, the EIA and the Management report specifies the fact that all these describe the protected species present within the RMP area and according to international, EU and Romanian law. Along the certain species a number of potential species (occurring in the adjacent areas, whose specific habitat is within RMP) were considered. It is also important to emphasize the fact that the above statement in Chapter 9.5 has no influence on the conclusions from these studies. The CFEN and Biodiversity Management Plan will introduce ecological mitigation measures and monitoring systems that will account for protected species. Thus, the impact on protected species will be reduced and quantitative assessment will evaluate such changes. The impact on the protected flora and fauna will be obvious only at local level, and it will not lead to the disappearance of any species. The mining project was conceived from the onset so as to comply with the conditions and standards stipulated by the Romanian and European legislation in the field of environmental protection. The company believes that the environmental impact generated by proposed project remains significant the more so as it will add to the pre-existing ones. But the required investments for the ecological restoration/rehabilitation of the Roşia Montană area meant to solve complex environmental issues existing at present can be developed only after the implementation of economic projects able to generate and ensure that direct and responsible measures are taken, as part of the principles that represent the basis for the sustainable development concepts. The presence of a strong economic system is the key for the implementation of clean economic processes and technologies, in full respect of the environment, which are able to remove the previous effects generated by human activities. The documentation drafted to support this mining project represents an objective justification for its implementation given that the company has assumed the environmental responsibility, which is extremely complex in the Roşia Montană area. Some of species existing at Roşia Montană that are under a certain protection status represent an insignificant percentage from populations estimated at national level. The characterization of species from their habitat point of view exists in the species tables presented in the Biodiversity Chapter of the EIA Report and its annexes, although this is not a requirement imposed by the Habitats Directive. Given the large amount of information contained, these tables are available in the electronic format of the EIA. 6,000 DVD/CDs comprising the EIA Report have been made available to the public both in English and in Romanian. Moreover, the EIA is also available on RMGC's website as well as on the websites of the Ministry of Environment and Waters Management and of the Local and Regional Environment Protection Agencies of Alba County, Cluj County and Sibiu County, etc.

		From practical point of view, the low value of conservation of the impact area is also indirectly emphasized by the fact that there is no proposal to designate the area a SPA (aviafaunistic special protected area) and by the denial as unfounded of the proposal to designate the area as a pSCI area (sites of community importance). Taking all these into account, we believe that the proposed Project is compliant with the provisions of EU Directive no. 92/43 Habitats[1], and EU Directive no. 79/409 Birds[2] respectively, especially because within Biodiversity Management Plan, Plan H, several active and responsible measures are provided to reconstruct/rehabilitate several natural habitats, pursuant to the provisions of the same documents [3]. **References:** **[1]** art.3, 2nd paragraph, Each Member State shall contribute to the creation of Natura 2000 (network) in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1. art.4, 1st paragraph. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11.[...] 2nd paragraph.[...] Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.[...] Art. 6, 4th paragraph. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

		Art. 16. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favorable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):[...] - in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment; [2] Art.4, 1st paragraph. The species mentioned in annex 1 shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. […] Trends and variations in population levels shall be taken into account as a background for evaluations. Member states shall classify in particular the most suitable territories in number and size as special protection areas for the conservation of these species, taking into account their protection requirements in the geographical sea and land area where this directive applies. [3] Directive 92/43 Habitats, art. 2, 2nd paragraph; Directive 79/409 Birds, art. 3, 2nd paragraph, letter c.
117	Species of flora are not listed in the chapter on biodiversity	The species of flora are listed in the EIA section, vol. 13, Annex 1. On 12 pages, there are listed 414 plant species, along with their occurrence and distribution attributes within the project area. Thus, the structure of vegetation remains typically characterized by the presence of ubiquistic, synantropic, and ruderal species, with an elevated ecologic plasticity. The handbook of habitats from Romania was rather recently published: end of 2005 – base volume; early 2006 – altered volume, according to the amendments for European Directive 92/43/EEC proposed by Romania and Bulgaria. During the next stage a complex and complete GIS map will be prepared for the habitats located within Project implementation area (a detailed map), and adjacent areas respectively (a map of major habitats correlated with habitats from Project implementation area). This detailed map is presented in Annex no. 2. The floristic structure of some vegetal associations has been analyzed within Volume 13, Chapter 4.6., Section 3.1.6. (vegetation from aquatic ecosystems), Section 3.2.1. (vegetation from forested ecosystems), 3.2.2. (Terrestrial and Aquatic Flora), 3.2.3. (Mushroom resources), and all data have been completed with the systematic list of flora species from Annex 1 (Chapter 4, Potential Impact, Section 4.6 Biodiversity – electronic format) that includes 414 species. This list is presented in Annex 4 of this report. The list also presents information on the relative abundance and occurrence at national level.

118	In relation to the listed species, information is lacking on there area of habitat, number and distribution.	The baseline study report of the biodiversity component (Vol. 13, Chapter 4.6) is a technical-administrative assessment. It is not intended to be a scientific exhaustive study which provides endless details and covers all aspects related to biodiversity. Torsvik & coll. 1990 emphasized that "nobody has succeeded until now, not even on a local level, to perform a complete inventory of a habitat". The study presented provides some aspects that relate to the natural environment in order to facilitate the decision making process and comply with the requirements of specific legislation. Taking into account the special relevance of the vegetal cover, the list of plant species (Chapter 4.6., Annex I) includes information that relates to the distribution and the frequency. A Compensatory Functional Ecological Network (CFEN) has been proposed (Biodiversity Management Plan, Vol. 27) which will be implemented from the beginning of the project. The CFEN will address floral and faunal species that are protected under legislation or have an economic or social value. The new biodiversity baseline will be transposed into a computerized database system which will employ GIS techniques. The new database will also be interconnected with the Romanian biodiversity national database system. The new biodiversity baseline will also indicate floral and faunal species which are protected under international/European and Romanian law. It will also indicate species of bio-indicative value respective of high ecological relevance. The new database will be open to other stakeholders who wish to integrate their data.
119	It is necessary to analyze and evaluate the impact of pollutants emitted into the environment and hazardous to health.	An evaluation of hazardous substances from pollutants in relation to human health was assessed. A prediction was made based on the concentration of hazardous substances within the residential and surrounding areas. The concentrations of the above mentioned substances did not exceed the maximum allowable values. Therefore, no issue on developing negative effects on the population's health status can arise. In spite of that, the EIA Report Volume – "Health Baseline" comprises of a health prediction related to hazardous substances generated by mining activities, even though the predicted concentrations were below the maximum allowable limit, as shown by the modelling performed by the group of experts. Obviously, should these concentrations be higher than the ones based on the modelling, then the possibility and/or probability of adverse effects occurrence against the health status would be different to the current scenario.
120	The main rules of Directive 1999/31/EC are infringed, e.g. there is no security for the management of environmental and health problems.	Directive 1999/31/EC is the Directive on the Landfill of Waste. This does not apply to mining projects such as Rosia Montana. The new EU Directive on the Management of Mining Wastes from the Extractive Industries applies (2006/21/EC). This will be operated in tandem with the EU BAT document for mining wastes. The design of the project fully in line with these statutory controls is explained in Chapter 2 of the EIA Study Report. These controls are specifically intended to safeguard the security and safety of people and the environment.
121	The structure of the documentation is complex, containing frequent cross-references, numerous overlapping, repeated data. Some parts of the material are repeated	The EIA Study Report is prepared fully in line with Romanian EIA regulations and guidance and its contents address the EIA Terms of Reference set out by the Romanian MEWM. The project itself is relatively complex and it raises many issues. As a result, the study report is complex and many issues are inter-related. This results in the need for cross-referencing and in deference to specialist reviewers who will likely examine selected chapters, there is some repetition in order that key chapters are each appropriately self-explanatory. The EIA study team believes

	through several volumes; the numbering of charts and tables is in many places incorrect. Moreover numerous important technical issues remain unanswered, and certain technical solutions are not appropriately substantiated. The documentation is partial, basically exclusively containing positive assessments, lacking any contradictions or points of uncertainty; the possible problems and negative consequences are not investigated in sufficient depth.	that all the significant issues are appropriately addressed and meet the required EIA Terms of Reference. The study team has carried out an objective assessment and it should be noted that as a result of some six years of environmental work carried out in parallel with the design of the project, many of the original problems and potential impacts have in effect been designed out. This process of interactive project design is part of the BAT for mining projects set out in the new EU Best Reference document for the management of mining wastes. This approach is fully explained in Chapter 2 of the study report. The tailings dam will never contain hydrogen cyanide, simply because this is a gaseous product which results from the CN volatilization process, at low pH, i.e. pH under 8.50% CN turns into HCN. The acid rains usually occur due to certain compounds of S or N in the air, or due to the emissions of certain strong acids (such as sulphuric acid, azotic acid or chlorine); the operations to take place on the proposed Project site don't have such potential. HCN has two characteristics: is very low soluble and doesn't react to water drops and breaks down quickly in the atmosphere – it turns into carbonate. The assessment of the HCN emissions is based on a Model summarized in Volume 12, Chapter 4.2 Air. AERMOD, Version 99351. -EPA, 2004. User's Guide for the AMS/EPA Regulatory Model – AERMOD. EPA-454/B-03-001, was used for modeling the dispersion of HCN. Please also see: http://www.epa.gov/scram001/dispersion_prefrec.htm#aermod. The concentrations estimate were much below the awareness limits stipulated by the standards for the air quality. The references for this Project include: -Cicerone, R.J., and Zellner, R., 1983. The atmospheric chemistry of hydrogen cyanide (HCN). Journal for geophysics' research, Volume 88, issue C15, pp. 10,689 – 10,696. -Mudder, T.I., Botz, M.M., and Smith A., 2001. Chemistry and Treatment of Cyanidation Wastes, Second edition. Mining Journal Books, Ltd., London, 373 p The Cyanide management Plan and the Air quality management Plan present clear solutions to prevent / reduce / remove the potential impact of the HCN emissions; starting from the results of the HCN dispersion model, we present here some of them: - the sodium cyanide will be handled in liquid form only, as from the unloading from the supply trucks, up to the time it is discharged onto the TMF, within the tailings; the sodium cyanide is represented by alkaline solutions of high pH (over 10.5-11) of various sodium cyanide concentrations. The scope of the alkalinity of these solutions is to maintain the cyanide as cyan ions form (CN^-) and to stop forming the hydrogen cyanide (HCN), phenomenon which occurs in environment of low pH only; - the volatilization of the cyanide off a solution can't happen as free cyanide, but HCN only; - the handling and storage of the cyanide solutions will only take place through closed systems; the only facilities / areas where HCN could form and volatilize, with small emission ratios, are the leaching tank and

the tailings thickener, as well as the tailings dam;

- the HCN emissions from the surface of the above mentioned tanks and from the surface of the tailings dam could occur due to the decrease of the pH within the superficial layers of the solutions (which encourages the occurrence of HCN) and due to the desorbtion (volatilization in the air) of this compound;
- the concentration of the cyanides within the handled solutions will decrease from 300 mg/L in the leaching tanks up to 7 mg/L (total cyanides) at the point of discharge into the tailings dam. The significant decrease of the cyanide concentration at the point of discharge into the tailings dam is supported by the detox system;
- the knowledge on the cyanide chemistry, as well as the experience from similar activities, have lead us to the following possible HCN emissions in the air: 6 t/year from the leaching tanks, 13 t/year from the tailings thickeners and 30 t/year (22.4 t, and 17 mg/h/m^2, during hot season and 7.6 t, and 11.6 mg/h/m^2, during the cold season) from the surface of the tailings dam, meaning a daily average total HCN emission of 134.2 kg;
- once emitted, the hydrogen cyanide is subject to certain chemical reactions in low atmosphere, leading to ammonia;
- the mathematical modeling of the HCN concentrations in the ambient air (if the HCN is not subject to chemical reactions in the atmosphere) showed the highest concentrations at the level of the soil, within the industrial site, namely within the area of the TMF and near the processing plant – the maximum concentration being of 382 μg/m^{3}per hour;
- the highest concentrations of HCN in the ambient air will be of 2.6 times less than the value imposed for the safety of the workers, as stipulated by the national legislation;
- the concentrations of HCN in the ambient air in the inhabited areas near the industrial site will be of 4 – 80 μg/m^3, over 250 – 12,5 less than the safety value as stipulated by the national legislation (the national legislation and the EU legislation for the air quality don't stipulate any limit values for the protection of population's health);
- the advance of the HCN in the atmosphere involves an insignificant compound of reactions in liquid phase (the water vapors in the atmosphere and the rain drops) because, at partial low pressure, specific to gases in free air, the HCN is very weak soluble in water, and the rain will not effectively reduce the concentrations from the air (Mudder, et al., 2001, Cicerone and Zellner, 1983);
- the chance for the value of the HCN concentrations in precipitations within or outside the area of the Project be significantly higher than the basic values (of 0.2 ppb) is extremely low.

For further details regarding the Use of cyanide in technological processes, the Balance of the cyanides, as well as the Emissions and the impact of the cyanide against the quality of the air, please see the EIA Report, Chapter 2, Chapter 4.1 and Chapter 4.2 (Section 4.2.3).
Such a report that the report the questioner refers to we received form the Ministry of Environment and waters management (MEWM) and it has been answered as part of the present annex.

		The Environmental Impact Assessment study report (EIA) that Roşia Montană Gold Corporation (RMGC) submitted responded fully and professionally to the Terms of Reference proposed by the Ministry of the Environment and Water Management (MEWM) and complied with the relevant legal provisions and international practices. More than 100 independent consultants, (certified) experts and specialists renowned at the national, European, and even international levels, prepared the report. We are confident that the EIA provides sufficiently detailed information and reasoning for its conclusions to permit the Ministry to make its decision on the Roşia Montană Project (RMP). Subsequent to submission of the EIA, it has been reviewed by two different sets of experts. Technical experts, representing several international private sector banks and export credit agencies have concluded that the EIA complies with the Equator Principles designed to promote responsible lending by financial institutions to projects which raise environmental and social concerns, and an ad hoc committee of European experts (International Group of Independent Experts - IGIE) has publicly stated that the EIA was well-developed, taking into consideration their recommendations and suggestions. A copy of the IGIE report and RMGC's response is included as a reference document to the present annex of the EIA.
122	The quality of the translation of English versions provided on CD support is poor and inadequate; in many cases, the keys, tables' references, maps and charts are in Romanian for the English version. Some tables and diagrams have no dimensions assigned, and this make them unreadable. The CDs did not contain documentation related to the baseline conditions (Baseline reports 1-6), this could only be downloaded from the websites.	The CDs were transmitted by the Ministry of Environment and Water Management; all the papers are both in Romanian and in English, except for those included in the Health baseline. Since the documents are in electronic format, they can be viewed at any scale in order to be readable. If Roşia Montană Gold Corporation (RMGC) inadvertently missed translation of certain tables, diagrams, or maps into English, we apologize; such small mistakes can sometimes happen in the translation of a document running to several thousand pages. But, under Romanian law, the environmental Impact Assessment study report (EIA) itself was presented to the public in English as well as Romanian and provides sufficient information for the public to comment in either language. Of course, the Romanian Ministry of Environment and Water Management (MEWM) has sole responsibility for approval of the project; therefore the Romanian text should be considered legally authoritative. Roşia Montană Gold Corporation (RMGC) set up 45 information centers where copies of the environmental Impact Assessment study report (EIA) were available, and 5,000 copies of the EIA were printed. So the EIA was made available to the public in other ways besides the Internet. Beyond this, the company has engaged in a long process of public consultation. Before submission of the EIA, RMGC changed various parts of the proposal, notably a reduction in the size of several proposed pits as well as enhancing sustainable development activities, and a stronger commitment to preservation of cultural patrimony including a reduced impact on local churches, in response to stakeholder consultations. From the reactions to the proposal in our extensive efforts at public consultation, we are confident that the vast majority of the people of Roşia Montană support the project.